

ED 032 073

By-Bolick, Gerald M.

Socio-Economic Profile of Credit Students in the North Carolina Community College System. Final Report.

North Carolina State Board of Education, Raleigh. Dept. of Community Colleges.

Spons Agency-Office of Education (DHEW), Washington, D.C. Bureau of Research.

Bureau No-BR-8-C-033

Pub Date Jul 69

Grant-OEG-3-9-080033-0005-010

Note-95p.

EDRS Price MF-\$0.50 HC-\$4.85

Descriptors-*Junior Colleges, Questionnaires, *Socioeconomic Background, *Student Characteristics

Identifiers-North Carolina

The primary purpose of this study is to provide an up-to-date report on certain social and economic characteristics of credit students enrolled in a newly established comprehensive community college system. A socioeconomic data sheet was constructed by the writer and completed by 11,184 students enrolled in 42 North Carolina community colleges and technical institutes. Comparisons were made between North Carolina students and those in other states, in addition to comparisons among the program areas and among curriculums within the occupational programs. The study indicates that the community colleges and technical institutes, through the open-door policy, have successfully extended universal education beyond the high school. But certain factors should be strengthened if these institutions are to provide a sound educative program for all the community. The results of the study indicate that there should be a determined effort to provide additional opportunities for the lower socioeconomic groups, the female, the evening student, and the student over 25. Social activities and the housing situation should be reviewed and adapted to the local situation. A more coordinated effort among the high schools, the community colleges and technical institutes, and the senior colleges is needed to provide a sound educative program for all the community. (Author)

ED032073

BR 8-C-033
PA 24
OE-BR

FINAL REPORT

Project No. 8-C-033

Grant No. OEG-3-9-080033-0005 (010)

**SOCIO-ECONOMIC PROFILE OF
CREDIT STUDENTS IN THE NORTH CAROLINA
COMMUNITY COLLEGE SYSTEM**

July, 1969

**U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE**

**Office of Education
Bureau of Research**

JC 690 337

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE
PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS
STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION
POSITION OR POLICY.

FINAL REPORT
Project No. 8-C-033
Grant No. OEG-3-9-080033-0005 (010)

SOCIO-ECONOMIC PROFILE OF CREDIT STUDENTS
IN THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM

Gerald M. Bolick

North Carolina Department of Community Colleges

Raleigh, North Carolina

July, 1969

The research reported herein was performed pursuant to a grant with the Office of Education, U. S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

Office of Education
Bureau of Research

JC 690 337

CONTENTS

	<u>Page</u>
ACKNOWLEDGMENTS	vi
SUMMARY	1
INTRODUCTION	4
Background of North Carolina's Community College System	6
Need for the Study	8
Purpose of the Study	11
Procedure	12
SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN COMMUNITY COLLEGES AND TECHNICAL INSTITUTES	16
Age Distribution	19
Educational Background	22
Family Income and Part-Time Employment	24
Race, Sex, Marital Status	27
Day or Evening Attendance	28
Geographic Characteristics	30
Student Activities	31
Student Plans	31
Typical North Carolina Student	33
SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN COLLEGE TRANSFER, TECHNICAL, AND VOCATIONAL PROGRAMS	35
Typical College Transfer Student	41
Typical Technical Student	41
Typical Vocational Student	42
SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN OCCUPATIONAL CURRICULUMS	43
Agriculture	43
Characteristics of Students	46
Typical Student	47

Distribution	48
Characteristics of Students	48
Typical Student	50
Engineering	50
Characteristics of Students	51
Typical Student	53
Health	53
Characteristics of Students	55
Typical Student	56
Home Economics	56
Characteristics of Students	58
Typical Student	59
Office	59
Characteristics of Students	61
Typical Student	62
Trade and Industry	62
Characteristics of Students	64
Typical Student	65
CONCLUSIONS AND RECOMMENDATIONS	66
BIBLIOGRAPHY	72
APPENDICES	81
Appendix A	82
Appendix B	84
TABLES	
Table 1 Socio-Economic Characteristics of Students Enrolled for Credit in Forty-Two North Carolina Community College Institutions	18
Table 2 Age Range of Students Enrolled in North Carolina Community College Institutions Compared to the Medsker Study	20
Table 3 Relationship Between High School Background and Types of Programs of the North Carolina Community College and Technical Institute Student Compared to A Similar Study by Anthony	23
Table 4 Number of Institutions by Percent of Students Who Indicated That They Would Have Attended Another Institution This Year	32
Table 5 Socio-Economic Characteristics of Students Enrolled in College Transfer Programs	37

Table 6	Socio-Economic Characteristics of Students Enrolled in Technical Programs	38
Table 7	Socio-Economic Characteristics of Students Enrolled in Vocational Programs	39
Table 8	Parent Income for the Three Program Areas	40
Table 9	Distribution of Occupational Curriculums in the Forty-Two North Carolina Community College Institutions	44
Table 10	Socio-Economic Characteristics of Students Enrolled in Agricultural Curriculums	45
Table 11	Socio-Economic Characteristics of Students Enrolled in Distribution Curriculums	49
Table 12	Socio-Economic Characteristics of Students Enrolled in Engineering Curriculums	52
Table 13	Socio-Economic Characteristics of Students Enrolled in Health Curriculums	54
Table 14	Socio-Economic Characteristics of Students Enrolled in Home Economics Curriculums	57
Table 15	Socio-Economic Characteristics of Students Enrolled in Office Curriculums	60
Table 16	Socio-Economic Characteristics of Students Enrolled in Trade and Industry Curriculums	63
Table 17	Socio-Economic Characteristics of Community College and Technical Institute Students for the North Carolina System, the College Transfer Program, the Technical Program, and the Vocational Program	69
Table 18	Socio-Economic Characteristics of Community College and Technical Institute Students in Each of the Seven Occupational Divisions	70

FIGURES

Figure 1 Proposed Locations of Community College Institutions	9
Figure 2 Socio-Economic Data Sheet	13
Figure 3 Location of North Carolina Community Colleges and Technical Institutes Participating in the Study	14

ACKNOWLEDGMENTS

The author gratefully acknowledges the assistance and cooperation of the many people who had a part in the design of the study; the collection and analysis of the data; and the preparation of the manuscript.

A special acknowledgment is given to Dr. I. E. Ready, Director of the North Carolina Department of Community Colleges, to his staff, and to the administration of each of the forty-two institutions for their permission to collect the data and for their assistance in the project.

The suggestions provided by Dr. Allan H. Hurlburt, Duke University, Dr. Walter F. Johnson, University of Michigan, Dr. Mary J. Bowman, University of Chicago, and Dr. Kurt W. Back, Duke University have been most constructive.

A special gratitude is expressed to Mrs. Virginia W. Absher for her untiring assistance in all phases of the project.

SUMMARY

The comprehensive community college or technical institute cannot be understood without a clear, factual, and unbiased understanding of its students. Planning for the future must take into account that the individuals who attend the community colleges and technical institutes differ widely in ability, in adjustment, in beliefs, and in physical and mental health. It is not only important that the administrator, the instructor, and the community know that these variations do exist but they should have a knowledge of their magnitude and nature.

The primary purpose of the study is to obtain a clearer understanding of the social and economic characteristics of the student in this relatively new approach to education. To obtain this information a socio-economic data sheet was constructed and completed by 11,184 students enrolled in forty-two community colleges and technical institutes throughout a newly established comprehensive community college system. The data sheet was composed of factors related to student and family income, parents' education, monetary assistance, employment status, sex, race, marital status, highest grade completed, high school curriculum, student's plans relative to future education and employment, class attendance, and distance to class.

The data were utilized to make comparisons among program and curriculum areas and between the North Carolina student and students in other states. In addition to the comparisons, profiles were constructed for the typical North Carolina student, the college transfer student, the technical student, and the vocational student. Other student profiles included in the study are: agriculture, distribution, engineering, health, home economics, office, and trades and industry.

The results of the study indicate that the North Carolina community colleges and technical institutes are enrolling students from many social and economic backgrounds. One of the most noticeable characteristics is the variation in age. Students attending the institutions vary in age from 17 to over 50 years; however, a majority of the students are 22 years of age or younger. The college transfer and technical students tend to be younger than the vocational students.

The data show that 92 percent of the students enrolled in the three credit programs have completed the twelfth grade or the GED, whereas 35 percent of their fathers and 46 percent of their mothers completed twelve years or the GED. Six percent of the students have already completed at least fourteen years of formal education but are working toward an associate degree or a vocational diploma.

More than one half of the students noted that their parents' income exceeded \$5000 for the last twelve months, and about one sixth of the students indicated that either their income or their parents' income exceeded \$10,000.

At the time the survey was completed 54 percent of the students were employed at least part-time. More than 40 percent of the students enrolled in the trades and industry curriculums indicated they were employed on a full-time basis.

Even though the institutions in the North Carolina Community College System accept students without regard to race, the percentage of non-white students in the community colleges and technical institutes is approximately one-half that of the non-white population of North Carolina. There is a considerable variation in the ratio of whites to non-whites among program areas and curriculums.

The overall male to female ratio of students in the North Carolina community colleges and technical institutes is 2 to 1; however the percentage of males ranges from 100 in one institution to 28 in another. A similar variation exists within the occupational programs.

More than ten percent of the students are "boarding" students, and more than one third of the students attend an institution located outside their home county. The number of "boarding" students varies from none in three institutions to almost one third of the student body in another institution. Fourteen percent of the students travel over 25 miles to class each day, although a majority of the students travel less than ten miles to class.

Eighty-six percent of the college transfer students plan to work toward a four-year degree, compared to 27 percent and 16 percent of the technical and vocational, respectively; the number of students who indicated that they plan to work toward a four-year degree is almost equal to the number of college transfer students.

The potential value of the community college system to the state is evident in that approximately one third of the students indicated they would not have attended an educational

institution this year if the institutions they are attending had not existed and in that more than three fourth of the students plan to be employed in North Carolina.

The data indicate that the community colleges and technical institutes, through the "Open Door" policy, have successfully extended universal education beyond the high school, but certain factors should be strengthened if these institutions are to provide a sound educative program for "all" the community. The results of the study indicate that there should be a determined effort to provide additional opportunities for the lower socio-economic groups, the female, the evening student, the non-white, and the "over 25" student. Social activities and the housing situation should be reviewed and adapted to the local situation.

A more coordinated effort among the high schools, the community colleges and technical institutes, and the senior colleges is needed to provide a complete and appropriate educational program.

Chapter I

INTRODUCTION

If such a complex community institution as a community college is to accomplish its functions effectively, it must identify the needs of those it serves, analyze the community to discover to what extent and to what degree those needs are being met through non-school experiences, provide a sound school program to meet the remaining needs, and lead the community to coordinate more effectively its total educational resources for the increased benefit of all its members.¹

Educators and community leaders should be aware of the fact that no blueprint should be presented for any group or class of community - related educational programs. The specific needs and resources of each educational institution and each community will differ too much from those of others to make such blueprinting possible, even if it were considered desirable. Furthermore, any program that will truly meet the needs of a particular institution and enlist the wholehearted support of the faculty, students, administrators, and community at large must be a program that is thought through and accepted locally.²

"Each institution must define its community in order to study it, to be alert to changes wrought in it by social forces, and to serve it."³ These principles apply to all types of community institutions, but especially to a community college.

In Article I Section 115A-2: of the "Community College Act" on July 1, 1963, the North Carolina Legislature defined the "community college as an educational institution," dedicated

1. Edmund G. Olsen (ed.), School and Community (New York: Prentice Hall, Inc., 1954), p. 448.

2. Ibid., p. 471.

3. Malcolm S. MacLean and Dan W. Dodson, "Educational Needs Emerging from the Changing Demands of Society," The Public Junior College (Chicago: University of Chicago Press, 1956), p. 32.

primarily to the educational needs of the particular area for which established, and

- a. which offers the freshmen and sophomore courses of a college of arts and sciences,
- b. which may offer organized curricula for the training of technicians,
- c. which may offer vocational, trade, and technical specialty courses and programs, and
- d. which may offer courses in general adult education.¹

The only difference in the organization of the technical institute and the community college is that in addition to the vocational, technical, and adult programs offered by the technical institute the community college offers the college transfer program.

The people of North Carolina were also aware that most rural boys and girls who go away to college do not return to work in their home communities. They are drained off into urban districts where their former family life and culture soon become extinct. Brownell believes that "one of the best ways to kill a small town is for the college to have no community orientation." He adds that by "siphoning off" the students from active citizenship in their home town the community is deprived of its potential leadership.²

The community college is basically a local institution. It can operate as a centralizing agency to bring the people of the area together. It can train directly for citizenship and can help to extend the sense of belonging. The local college can also postpone for at least a year or more the "siphoning off" which Brownell describes and give the youth that much more opportunity to get their roots into the nourishing soil of the community.³

1. Public School Laws of North Carolina, (1963), c. 115, sec. A., General Statutes of North Carolina, p. 2.

2. Baker Brownell, The College and the Community (New York: Harper and Brothers, 1952), p. 20.

3. MacLean and Dodson, "Educational Needs Emerging from the Changing Demands of Society," p. 32.

Background of North Carolina's Community College System

The basis of the North Carolina Community College System dates back to 1952 to the Community College Study;¹ however, the system as it existed in 1969 dates to The Report of the North Carolina Governor's Commission on Education Beyond the High School² of 1962. This report indicated a need for a community college system in North Carolina that would provide a relatively small comprehensive college within commuting distance of most students. The commission stated these requirements as follows:

If the opportunity for a college education is in fact to be made available to all of the young people who will be eager for it, there must be sufficient geographical dispersal of colleges that large numbers of students may commute to college. In a state where in 1960 half the families had an income of less than \$4,000 it hardly need be argued that a great many capable students will not be able to attend a residential college at a cost of \$1,000 to \$2,000 per year. But by living at home, and perhaps by carrying a part-time job, they can afford to attend a local public college.³

Published reports tend to indicate a close relation between the presence of a college in a county and a high incidence of college attendance by the residents.

The commission also pointed out the economic advantage to the state of a community college system as compared to residential colleges:

Another strong factor in favor of nonresidential community colleges is their relative economy in capital outlay. Lacking dormitories at a cost of nearly \$3,000 per resident and lacking other supporting facilities of a type essential to a residential college plant is consequently less

1. Allan S. Hurlburt, Community College Study (Raleigh: State Superintendent of Public Instruction, 1952), (Publication No. 285) 44 pages.

2. Irving E. Caryle, Chairman, The Governor's Commission on Education Beyond the High School (Raleigh: State of North Carolina, 1962).

3. Ibid., p. 65.

expensive to build and maintain. And the non-residential two-year college is the most economical of all, because of its less extensive library, laboratory, and other physical requirements in comparison with those of a senior college.¹

Kastner asserts that a state cannot afford not to have a community college system because the community college graduate will yield an annual interest return on the taxpayer's investment of at least 12.28 percent for males and 11.01 percent for females over a forty-five year work period.²

The North Carolina Governor's Commission defined a service area for a community college:

The area to be served by a community college is necessarily defined by the distance which students may be expected to commute. Forty-five minutes or about thirty road miles each way define the maximum practical daily commuting range.³

It may be noted that the Community College Study⁴ in 1952 designated twenty-five miles as a reasonable commuting distance. However, the difference in road miles could be justified in many parts of the state by the improvement in road conditions over the ten-year period. The commission might have deemed it necessary, in some locations, to extend the geographical boundaries in order to insure a full-time student equivalent enrollment of 400 to 500 students for each institution by the end of the first five years of operation. The enrollment size was deemed essential by the commission "to give a community college sound prospects of success."

1. Ibid., p. 65.

2. Harold H. Kastner, Jr., "The Economic Value of Community Colleges," Junior College Journal, Vol. 46,

3. Caryle, The Governor's Commission on Education Beyond the High School, p. 73.

4. Hurlburt, Community College Study, p. 34.

5. Caryle, The Governor's Commission on Education Beyond the High School, p. 73.

The Hamilton Report¹ of 1962 gives a relatively detailed area designation as to where community college units should be located. A map showing the designated areas is included as Figure 1, page 9.

Need for the Study

The community college cannot be understood without a clear, factual, and unbiased understanding of its students. The college must define clearly the groups in the community whose educational needs it plans to serve if it is to offer a complete, appropriate education. This information is needed by the instructors so that they may adapt their methods to the facts of student needs and purposes. Patrons and students profit from accurate information when determining what they can expect from the college. Administrators and policy makers of the institutions need this information to help them fulfill their obligation to the community and to the institutions. Writers on educational subjects especially need this understanding in order that their recommendations for the development of higher education may be appropriate and workable.²

The community college is not limited to the usual college curriculums and degrees. Its offerings and activities are geared especially to the people it serves. It is usually locally controlled; consequently it can be more responsive to local needs and aware of community resources useful in program development and operation.³

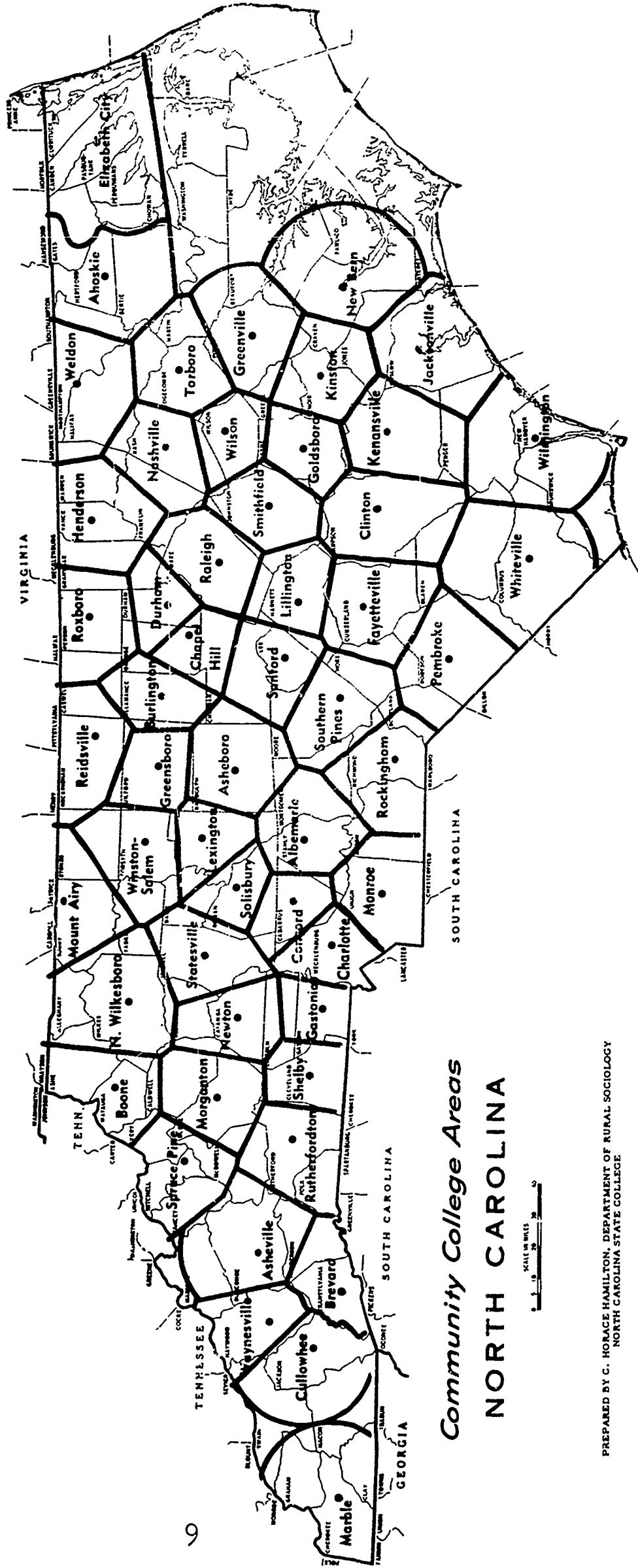
"Planning for the future must take into account the basic fact that whatever system of higher education emerges from the effort to assimilate eleven million or even seven million students, will need to be adapted, not only to great variation in academic aptitude and achievement, but also to highly

1. Horace Hamilton, Community Colleges for North Carolina (Raleigh: North Carolina Board of Higher Education, 1962), p. 30.

2. James W. Thornton, Jr., The Community Junior College (New York: John Wiley and Sons, Inc., 1960), p. 146.

3. The Yearbook Committee, "Role of the Public Junior College," The Public Junior College, Ed. Nelson B. Henry (Chicago: University of Chicago Press, 1956), p. 69.

Figure 1
Proposed Locations of Community College Institutions
Hamilton Report



PREPARED BY C. HORACE HAMILTON, DEPARTMENT OF RURAL SOCIOLOGY
NORTH CAROLINA STATE COLLEGE

diverse social and cultural backgrounds, interests, and dispositions."¹

The characteristic of junior community college students which has been studied most thoroughly is their academic aptitude. This is an important factor which allows comparisons to be made of junior college students with students in other educational institutions.

The community junior college shares an interest in academic aptitude, so important to the "transfer" part of its curriculum, but it is interested also in other practical aptitudes which may exist somewhat independently of verbal and numerical aptitudes. College aptitude tests do not measure all the human aptitudes important to the community junior college student. Recent studies in higher education have included other student characteristics. According to McConnell interest in nonacademic aptitudes stems from several sources:

One is the evidence that measured scholastic aptitude, or even previous scholastic achievement, is in only a limited degree related to college success, expressed either in persistence or in grade-point averages. It is becoming increasingly apparent that the social and cultural background of students, the poverty or the wealth and variety of their previous experience, condition their educational development.

Their attitudes, values, intellectual disposition, and educational goals will likewise help determine how they respond to instruction, to student and faculty culture, to the dominant characteristics of the institutions they attend.²

It has been noted that individuals who seek or need more education differ widely in ability, in adjustment, in beliefs, and in physical and mental health. While some needs are important in determining interest in future education, others are equally potent in determining the kind and amount of education desired. Some students have heavy responsibilities and few resources, whereas others are in a most favorable financial position. Financial need and accessibility are

1. T. R. McConnell, A General Pattern for American Public Higher Education (New York: McGraw-Hill Book Company, 1962), p. 19.

2. Ibid., p. 20.

major factors in determining whether individuals are able to obtain an education beyond high school. Equally important is the availability of a wide range of programs adapted to the needs, interests, and abilities of the prospective students. The programs must also be related to the economy of the area in order that placement for graduates will be available.¹

Purpose of the Study

The primary purpose of this study is to provide an up-to-date report of certain economic, geographic, and educational characteristics of credit students enrolled in a newly established comprehensive community college system. In addition to providing an up-to-date report the study is designed:

- To establish socio-economic profiles for the following:
 - The North Carolina Community College System.
 - Each of the three program areas that offer credit.
 - Each of the seven curriculums in the occupational programs.
- To compare certain socio-economic characteristics of the North Carolina Community College and Technical Institute student with their counterpart in other states.
- To determine how much variation exists among students attending the North Carolina Community Colleges and Technical Institutes as indicated by certain socio-economic characteristics.
- To collect data that will serve as a base for follow-up studies to test the effect of various student characteristics on such factors as drop-out rate, student grades, employment opportunities, and employment success.

1. Paul L. Dressel, "Educational Demands Arising From Individual Needs and Purposes," The Public Junior College, Ed. Nelson B. Henry (Chicago: University of Chicago Press, 1956), p. 41.

. To provide information related to the socio-economic characteristics of students attending community colleges and technical institutes to other states that have community college programs or which intend to initiate such programs.

Procedure

A socio-economic data sheet (Figure 2, page 13) was completed by 11,184 students enrolled in the three credit programs (college transfer, technical, and vocational) in forty-two community colleges and technical institutes located throughout North Carolina (Figure 3, page 14). Over 70 percent of the students enrolled in the forty-two institutions during the winter quarter of 1967-68 for credit participated in the study. The data sheet is composed of socio-economic factors related to student and family income, parents' education, monetary assistance, employment status, sex, race, marital status, highest grade completed, high school curriculum, student's plans relative to future education and employment, class attendance, and distance to class.

The data sheets were issued and explained to personnel directors from each institution at their January, 1968 meeting. The data sheets were completed during the winter quarter and returned to the Department of Community Colleges. The writer began an immediate follow-up to insure a high percentage of participation.

As soon as the data were collected, coded, and placed on computer cards the information was compiled and used to construct tables showing percentage distribution of answers to the various questionnaire items. One of these tables is the all-state distributions of answers on all of the twenty-five questions; this constitutes a summary profile of the characteristics of students enrolled for credit in the North Carolina community colleges and technical institutes. Others compare distributions on a program basis (college transfer, technical, and vocational) and provide separate profiles for students in each of the three credit programs in the community college system. The final comparison includes the seven occupational programs and provides separate profiles for agriculture, business, engineering, health, home economics, office, and trades and industry. These tabulations for the North Carolina System have been supplemented by comparisons between

Figure 2

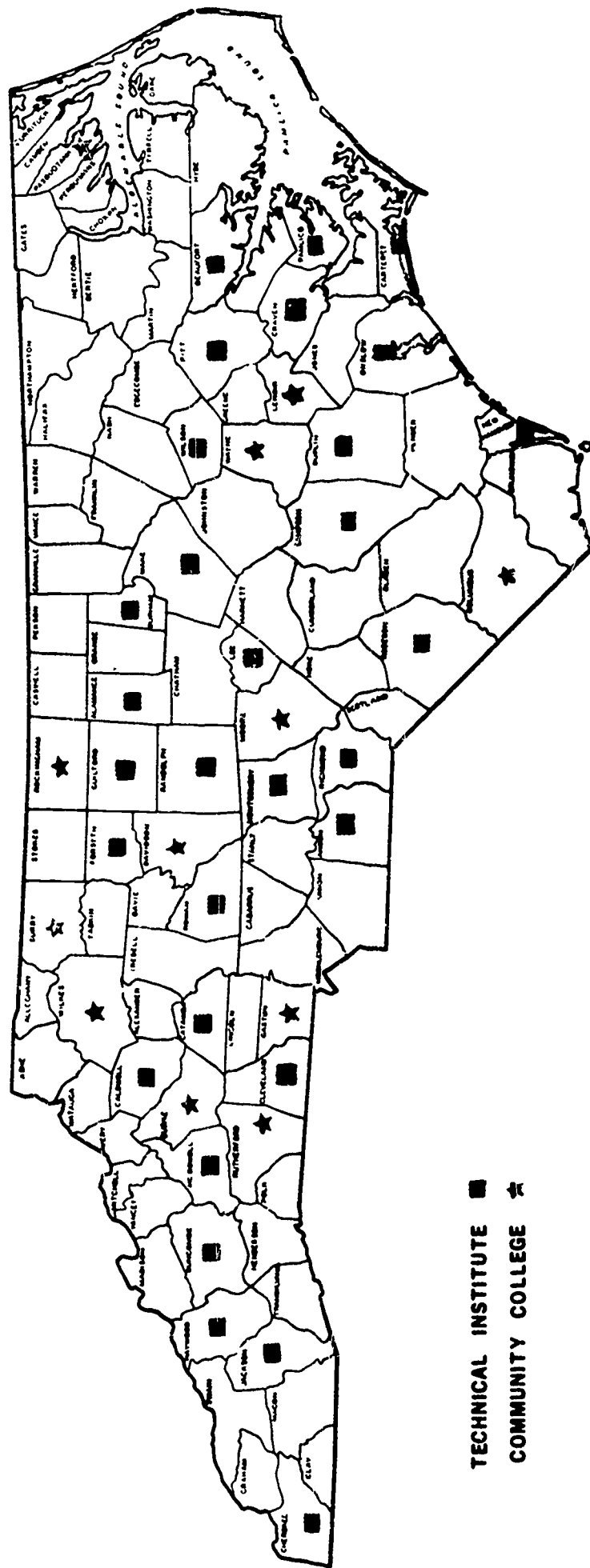
Socio-Economic Data Sheet

STATE BOARD OF EDUCATION
DEPARTMENT OF COMMUNITY COLLEGES

INSTRUCTIONS: Read the question carefully and place a ☒ for your selection. Do not leave any questions unmarked.

<p>1. Program <input type="checkbox"/> College Transfer <input type="checkbox"/> Technical <input type="checkbox"/> Vocational</p> <p>2. If enrolled in Occupational Program check one <input type="checkbox"/> Agriculture <input type="checkbox"/> Distribution <input type="checkbox"/> Engineering <input type="checkbox"/> Health <input type="checkbox"/> Home Economics <input type="checkbox"/> Office <input type="checkbox"/> Trades and Industry</p> <p>3. Classification <input type="checkbox"/> New Freshman <input type="checkbox"/> Returning Freshman <input type="checkbox"/> Sophomore</p>	<p>4. Attendance <input type="checkbox"/> Day <input type="checkbox"/> Evening (Most classes after 5:00 P.M.)</p> <p>5. Contact hours this quarter <input type="checkbox"/> 1-6 <input type="checkbox"/> 18-20 <input type="checkbox"/> 7-11 <input type="checkbox"/> 21-25 <input type="checkbox"/> 12-15 <input type="checkbox"/> 26-30 <input type="checkbox"/> 16-17 <input type="checkbox"/> Over 30</p> <p>6. Referred to this institution by <input type="checkbox"/> Parent <input type="checkbox"/> Employer <input type="checkbox"/> Other Student <input type="checkbox"/> Radio, Newspaper, TV <input type="checkbox"/> School Recruiter <input type="checkbox"/> High School Counselor <input type="checkbox"/> Welfare Agency</p>
<p>7. Sex <input type="checkbox"/> Male <input type="checkbox"/> Female</p> <p>8. Race <input type="checkbox"/> White <input type="checkbox"/> Negro <input type="checkbox"/> American Indian <input type="checkbox"/> Othe. (Specify) _____</p> <p>9. Age <input type="checkbox"/> 17 <input type="checkbox"/> 18 <input type="checkbox"/> 26-29 <input type="checkbox"/> 19 <input type="checkbox"/> 30-39 <input type="checkbox"/> 20-22 <input type="checkbox"/> 40-49 <input type="checkbox"/> 23-25 <input type="checkbox"/> Over 30</p> <p>10. Marital status <input type="checkbox"/> Single <input type="checkbox"/> Widowed <input type="checkbox"/> Married <input type="checkbox"/> Separated <input type="checkbox"/> Divorced</p> <p>11. Highest grade completed <input type="checkbox"/> 7-8 <input type="checkbox"/> 13 <input type="checkbox"/> 9-11 <input type="checkbox"/> 14 <input type="checkbox"/> 12 <input type="checkbox"/> 15-16 <input type="checkbox"/> GED <input type="checkbox"/> Above 16</p> <p>12. High school curriculum <input type="checkbox"/> General <input type="checkbox"/> Vocational <input type="checkbox"/> Academic</p> <p>13. Highest grade completed - father <input type="checkbox"/> Less than 7 <input type="checkbox"/> 7-8 <input type="checkbox"/> 13 <input type="checkbox"/> 9-11 <input type="checkbox"/> 14 <input type="checkbox"/> 12 <input type="checkbox"/> 15-16 <input type="checkbox"/> GED <input type="checkbox"/> Above 16</p> <p>14. Highest grade completed - mother <input type="checkbox"/> Less than 7 <input type="checkbox"/> 7-8 <input type="checkbox"/> 13 <input type="checkbox"/> 9-11 <input type="checkbox"/> 14 <input type="checkbox"/> 12 <input type="checkbox"/> 15-16 <input type="checkbox"/> GED <input type="checkbox"/> Above 16</p> <p>15. Distance to class each day (one way) <input type="checkbox"/> Less than 1 mile <input type="checkbox"/> 10-15 <input type="checkbox"/> 1-3 <input type="checkbox"/> 16-25 <input type="checkbox"/> 4-6 <input type="checkbox"/> 26-30 <input type="checkbox"/> 7-9 <input type="checkbox"/> Over 30</p> <p>16. Residence while attending class <input type="checkbox"/> Live with parents <input type="checkbox"/> Live with spouse <input type="checkbox"/> Boarding student <input type="checkbox"/> Other (Specify) _____</p>	<p>17. Is this institution located in your home county <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>18. Employment status <input type="checkbox"/> Unemployed <input type="checkbox"/> Employed part-time <input type="checkbox"/> Employed full-time</p> <p>19. Would you have attended another educational institution this year if this institution had not existed <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>20. Estimated parent income for last 12 months <input type="checkbox"/> Less than \$999 <input type="checkbox"/> \$1000 - 1999 <input type="checkbox"/> \$2000 - 2999 <input type="checkbox"/> \$3000 - 3999 <input type="checkbox"/> \$4000 - 4999 <input type="checkbox"/> \$5000 - 5999 <input type="checkbox"/> \$6000 - 7499 <input type="checkbox"/> \$7500 - 9999 <input type="checkbox"/> Above \$10,000</p> <p>21. Estimated student income for last 12 months <input type="checkbox"/> Less than \$999 <input type="checkbox"/> \$1000 - 1999 <input type="checkbox"/> \$2000 - 2999 <input type="checkbox"/> \$3000 - 3999 <input type="checkbox"/> \$4000 - 4999 <input type="checkbox"/> \$5000 - 5999 <input type="checkbox"/> \$6000 - 7499 <input type="checkbox"/> \$7500 - 9999 <input type="checkbox"/> Above \$10,000</p> <p>22. Assistance received <input type="checkbox"/> G. I. Bill <input type="checkbox"/> Scholarship <input type="checkbox"/> Vocational Rehabilitation <input type="checkbox"/> Welfare Agency <input type="checkbox"/> Other (Specify) _____</p> <p>23. Plan to work toward 4 year degree <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>24. Plan to be employed in North Carolina <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>25. If answer to 24 is no check one of the following <input type="checkbox"/> Enter military service <input type="checkbox"/> Marriage <input type="checkbox"/> Work in another state <input type="checkbox"/> Other (Specify) _____</p>

Figure 3
Location of North Carolina Community Colleges and Technical Institutes
Participating in the Study



these data and existing data for community college units in other states.

A preliminary study involving 250 students was conducted by the researcher during 1966-67. The purpose of the study was to field-test the survey instrument and the methods used in the comparisons. As a result of the previous study the 1968 data sheet was limited to 25 questions, rather than 28, designed as a multiple-choice, rather than an open-end instrument; completed by the students in the classroom, instead of at registration; and percentage ratings for each answer were determined rather than a mean score for each question.

Chapter II

SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN COMMUNITY COLLEGES AND TECHNICAL INSTITUTES

No matter what human characteristics one selects, wide variation is the rule among prospective community college students. In contrast to the customary age interval of eighteen to twenty-four years for college students of a few years back the upper limit today must be regarded as sixty or seventy years of age. With reference to intelligence, an IQ of 110 has traditionally been regarded as the minimum for a college degree. On the other hand, the comprehensive community college of today undertakes to provide education for all students over eighteen. Thus, education is faced with the task of catering increasingly to individuals of diverse abilities, interests, attitudes, values, personality traits, and previous preparation.¹

Hillway gives an illuminating description of the community college student in his book, The American Two-Year College:

Many students are what one might call "two-year students." This does not imply any lack of ability or ambition. The student may simply be impatient for independence and thus prefer to enter as quickly as possible upon his career. Should his ideas change during these two years, the door is still open for him. On the other hand, should he continue of the same option and remain in college for no more than two years, he will have completed a recognizable unit of study.

The student may be one who plans to enter one of the occupations for which the two-year college offers preparation. He is not likely to find a program to meet this need in the standard four-year college.

1. Jesse Parker Bogue, The Community College (New York: McGraw Hill Cook Co., 1950), p. 56.

Another type of student for whom the two-year college offers a particular advantage is the person who has not yet made up his mind regarding future plans. Two years of an exploratory nature, especially if the college provides expert counseling and guidance, may be just what such a student needs in planning his career.

If there is a two-year community college in his home town, a student may wish to attend it simply to save money. Regardless, of whether he desires two years of college or a great deal more, the question of cost can be a very important consideration for the average young American.

The student who is relatively immature when he graduates from the twelfth grade may profit from attendance at a local community college. By doing so he may receive more personal attention from the faculty and greater opportunity to develop his personality and social ability.¹

There is another group of persons in attendance in the comprehensive community college. This group consists of adults who because of various obligations are unable to attend a college located outside the community. Often housewives may be found in the day classes while their husbands or career women attend the evening sessions.

In light of the foregoing considerations, the major purposes of the comprehensive community college may be identified as (1) preparation for advanced study (2) vocational education (3) general education and (4) community service.

Although these objectives are widely recognized and generally accepted, each community college has a responsibility for determining its own specific objectives in accordance with the characteristics of its particular community.

This section of the study is devoted to a comparison of certain social and economic characteristics of students enrolled in community colleges and technical institutes in North Carolina (Table 1, page 18) with their counterparts in similar institutions in other states. In addition to this comparison a brief description of the typical North Carolina student is presented.

1. Tyrus Hillway, The American Two-Year College (New York: Harper and Brothers, 1958), p. 88.

Table 1
Socio-Economic Characteristics of Students Enrolled for Credit in Forty-Two North Carolina Community College Institutions
(Number of Students - 11,184)

Program	Number of Students	Percent of Total	Number of Students	Percent of Total	Number of Students	Percent of Total
College transfer	2,632	23.5	7,653	68.4	6,890	61.6
Technical	5,243	46.9	3,126	28.0	4,191	37.5
Vocational	3,220	28.8	154	01.4	103	00.9
Did not answer	89	00.8	85	00.8		
Curriculum			113	01.0		
Agriculture	414	03.7	53	00.5	5,102	45.6
Distribution	256	02.3			3,608	32.3
Engineering	1,266	11.3			2,369	21.2
Health	911	08.1			105	00.9
Home Economics	25	00.2				
Office	2,174	19.4				
Trade and industry	2,677	23.9				
Did not answer	3,461	30.9				
Classification						
New freshman	3,782	33.8				
Returning freshman	4,380	39.2				
Sophomore	2,645	23.7				
Did not answer	377	03.4				
Attendance						
Day	9,303	83.2				
Evening	1,808	16.2				
Did not answer	73	00.6				
Contact hours						
1-6	805	07.2				
7-11	616	05.5				
12-15	1,528	13.7				
16-17	1,056	09.4				
18-20	1,788	16.0				
21-25	1,883	16.8				
26-30	1,581	14.1				
Over 30	1,680	15.0				
Did not answer	247	02.2				
Referred student to institution						
Parent	1,772	15.8				
Employer	568	05.1				
Other student	3,078	27.5				
Radio, newspaper, TV	1,290	11.5				
School recruiter	924	08.3				
High school counselor	2,725	24.4				
Welfare agency	115	01.0				
Did not answer	712	06.4				
Race						
White	9,597	85.8				
Negro	1,365	12.2				
American Indian	93	00.8				
Did not answer	129	01.1				
Age						
17	95	00.8				
18	2,195	19.6				
19	3,170	28.3				
20-23	2,760	24.7				
23-25	841	07.5				
26-29	640	05.7				
30-39	926	08.3				
40-49	426	03.8				
Over 50	96	00.9				
Did not answer	35	00.3				
Sex						
Male	7,527	67.3				
Female	3,595	32.1				
Did not answer	62	00.5				
Marital status						
Single						
Married						
Divorced						
Widowed						
Separated						
Did not answer						
Highest grade completed						
7-8						
9-11						
12						
GED						
13						
14						
15-16						
Above 16						
Did not answer						
High school curriculum						
General						
Vocational						
Academic						
Did not answer						
Highest grade completed-father						
Less than 7						
7-8						
9-11						
12						
GED						
13						
14						
15-16						
Above 16						
Did not answer						
Highest grade completed-mother						
Less than 7						
7-8						
9-11						
12						
GED						
13						
14						
15-16						
Above 16						
Did not answer						
Distance to class each day (one way)						
Less than 1 mile						
1-3						
4-6						
7-9						
10-15						
16-25						
26-30						
Over 30						
Did not answer						
Residence while attending class						
Live with parents						
Live with spouse						
Boarding student						
Other						
Did not answer						
Is this institution located in your home county						
Yes						
No						
Did not answer						
Employment status						
Unemployed						
Employed part-time						
Employed full-time						
Did not answer						
Would you have attended another educational institution this year if this institution had not existed						
Yes						
No						
Did not answer						
Estimated parent income for last 12 months						
Less than \$999						
\$1000 - 1999						
\$2000 - 2999						
\$3000 - 3999						
\$4000 - 4999						
\$5000 - 5999						
\$6000 - 7499						
\$7500 - 9999						
Above \$10,000						
Did not answer						
Estimated student income for last 12 months						
Less than \$999						
\$1000 - 1999						
\$2000 - 2999						
\$3000 - 3999						
\$4000 - 4999						
\$5000 - 5999						
\$6000 - 7499						
\$7500 - 9999						
Above \$10,000						
Did not answer						
Assistance received						
G. I. Bill						
Scholarship						
Vocational rehabilitation						
Welfare agency						
Other						
Did not answer						
Plan to work toward 4 year degree						
Yes						
No						
Did not answer						
Plan to be employed in North Carolina						
Yes						
No						
Did not answer						
If answer to above is no check one of the following						
Enter military service						
Marriage						
Work in another state						
Other						
Did not answer						

Age Distribution

As with other characteristics, age distribution will also vary from one community college to another, but in all of the colleges will be found an encouraging number of men and women in their twenties and thirties, seeking through education to find the key to new opportunities and enrich personal living.

College students today range from young to old, able to mediocre, idealistic to practical, naive to sophisticated, rich to poor; they are of all races, of all faiths - and of no faith. They are both self-supporting and self-dependent on their families. All these go to college, each for his own purpose. As the numbers of students continue to increase so does the range of their individual differences.¹

The diversity found among the college students in the above quotation is also applicable to the students attending the North Carolina community colleges and technical institutes. The wide diversity in student characteristics in North Carolina is evident in Table 2, page 20. Student ages range from 17 to more than 50 years, with 74 percent falling in the 18 to 22 bracket. More than 50 percent of the community college and technical institute students are between the ages of 19 and 22 according to this survey.

The age of students enrolled in the North Carolina community colleges and technical institutes are compared below with those in a similar study conducted by Medsker in the late 50's in which he compiled data on the ages of 13,304 community college students in California. The comparison shows that the North Carolina students are considerably younger than the California students in Medsker's Study. Seventy-four percent of the North Carolina students are between 16 and 22 years of age compared to 52 percent of the California students.

1. W. Max Wise, They Came for the Best of Reasons: College Students Today (Washington: American Council on Education, 1958), p. 2.

Table 2

Age Range of Students Enrolled in North Carolina
Community College Institutions Compared to The Medsker Study¹

Age	North Carolina Percent	Medsker Percent
16-17	1	2
18	20	24
19	28	17
20-22	<u>25</u> 74	<u>10</u> 53
23-25	7	19
26-29	6	12
30 and Over	<u>13</u> 26	<u>16</u> 47

At Coalinga College (California), Thornton found that 10 percent of the students were more than thirty years of age.² This is somewhat lower than in the North Carolina and Medsker studies where 13 percent and 16 percent of the students, respectively, are thirty years of age or over.

Students in community colleges throughout the nation vary in age from sixteen to more than seventy years. The high proportion of older students indicates that the community college is fulfilling its function of making education available to those to whom education had earlier been denied - the veteran, the housewife, the so-called "late bloomer;" and the retrainee.

It is significant that about one sixth of the group, 16 percent, were thirty years of age or older. This tends to strengthen the consensus that there is an increasing tendency for older youths and adults to pursue college work. A higher average age appears to be particularly characteristic

1. Medsker, The Junior College: Progress and Prospect, p. 45.

2. Thornton, The Community Junior College, p. 151.

in community colleges where men and women with work and family responsibilities can attend college in their home communities without disrupting their personal lives.

As continuing education becomes increasingly common, all sorts of provisions for vocational, general, professional, and liberal education will be possible. Much of what we assume should be learned by adolescents may be better acquired by adults. There appears to be no reason why much of the load which formal, full-time education has normally carried cannot in the future become a part-time activity. "Such rescheduling should enable us not so much to weave both vocational training and general education into a person's curriculum as to weave them into his life. And by keeping both kinds of education open at all levels, the education and re-education-in-depth that our society requires becomes possible."¹

The wide age range of students suggests the necessity for community colleges to adapt their instructional methods, their social programs, and their student personnel services to meet the needs and interests of the different age groups. The college in which half or more of the student body is 20 years of age or more is obviously accommodating persons who either were not graduated from high school or did not enter college immediately after high school graduation. Such students bring maturity, experience, definiteness of purpose, motivation, and other assets, but they may be at a disadvantage as a result of their long absence from the classroom and additional personal responsibilities.²

These students are adults and expect to be treated as such. According to Dressel, most adults enroll for further education because they want it. They are well motivated and eager to learn and seem to be more sensitive than youth to environmental factors such as seating, lighting, and ventilation. They demand and appreciate good instruction. Time is tremendously important to adults because of the many roles and responsibilities which they have. They like materials in short, complete units which they can relate directly to daily problems. Thus the adult student is appreciative of systematic and business-like handling of classes. The adult demands opportunity for participation in class activity; he wants a

1. McConnell, A General Pattern for American Public Higher Education, p. 58.

2. Leland L. Medsker, The Junior College: Progress and Prospect (New York: McGraw-Hill Book Company, 1960), p. 43.

congenial atmosphere and good fellowship, and he expects to learn from the class. If he is denied these satisfactions, he is likely to discontinue.¹

"All would agree that more oldsters would be welcome."² They have brought experience, spice, stability, and competitive "push" to the student body.

As with other characteristics, age distribution will also vary from one community college to another, but in all of the colleges will be found an encouraging number of men and women in their twenties and thirties, seeking through education to find the key to new opportunities and to enrich personal living.

Educational Background

The basic admission policy of many community colleges is simple: "Any high school graduate, or any person more than 18 years of age who seems capable of profiting by the instruction offered, is eligible for admission." It does not, of course, guarantee that every student will succeed. Its purpose is to make sure that every person is granted the opportunity to succeed or fail by his own efforts.

Admission to the community college system is possible for practically any high school graduate, and in some cases non-high school graduates, but admission to specific programs varies with the demands of each program.

Medsker³ found that although community college instructors insist on high entrance standards, there appeared to be general agreement that admission must be flexible. Only five percent of the staff in his study said they would not permit a young adult to enroll, provisionally, who had not graduated from high school but whose records showed he was a good student.

1. Dressel, "Educational Demands Arising from Individuals Needs and Purposes," p. 50.

2. Thornton, The Community Junior College, p. 152.

3. Medsker, The Junior College: Progress and Prospect, p. 185.

The North Carolina community colleges and technical institutes admit only high school graduates or students who possess an adult high school diploma or a high school equivalency certificate to the college transfer and technical programs; however, students who have completed the ninth grade are accepted in the vocational programs.

Table 3 compares the data in this study with a study by Anthony.¹ Both of the studies are concerned with the relation that the high school program in which the student was enrolled has on whether he enrolls in a transfer or terminal program in a community college or technical institute.

Table 3

Relationship Between High School Background and Types of Programs of the North Carolina Community College and Technical Institute Student Compared to a Similar Study by Anthony

	General Academic		Vocational	
	North Carolina	Anthony	North Carolina	Anthony
Transfer	97%	75%	3%	25%
Terminal	87%	56%	13%	44%

In both studies the student who had completed the high school academic program tended to enroll in college transfer courses, whereas those with backgrounds in vocational education were more likely to enroll in terminal courses. Anthony found that 75 percent of the college transfer students came from general academic programs in high school, whereas only 25 percent came from vocational programs. The North Carolina Study shows a much higher percentage of transfer and terminal students coming from general academic programs than does the Anthony Study. In both studies a larger percentage

1. Donald M. Anthony, "The Relationship of Certain Socio-Economic and Academic Factors to Student Choice of Occupation and Program in Public Junior Colleges," Unpublished doctoral dissertation presented at the University of Texas, Austin, Texas, 1964, p. 156.

of the former vocational students are classified as terminal students in the community college or technical institute.

The educational background of students in North Carolina as in most other comprehensive community colleges ranges from less than nine years of school completed to over 16 years completed. Often these two extremes may be found in the same vocational class. (College transfer and technical applicants are required to have completed high school or its equivalent.) The survey indicates that five percent of the students have met their high school educational requirements through the General Educational Development Program (GED). It should be noted that six percent of the students enrolled in a community college or technical institute program have already completed at least 14 years of formal education but are working toward an associate degree or a vocational diploma. More than 92 percent of the students have completed the twelfth grade or GED, whereas 35 percent of their fathers and 43 percent of their mothers completed 12 years or the GED.

Family Income and Part-Time Employment

One of the earliest advantages claimed for the public community college was that it was expected to make higher education more readily available to able young people who would not be able to attend college away from home. There are many factors that may prevent a person from attending college, but probably the most important factor is family income.

Thornton notes that recent evidence seems to indicate that the public community college does attract able young people from less favored socio-economic groups, presumably increasing the pool of trained and educated talent in American society.¹

The question of cost is a much emphasized point in The Report of the President's Commission on Higher Education. The commission believes that lack of money is the chief barrier to further education for most young people. It also states that community colleges should be established in all areas not already served by local collegiate

1. Thornton, The Community Junior College, p. 156.

institutions to help alleviate the financial burden.¹

The fact that 24 percent of the student's parents have an income of less than \$4000 per annum and that 62 percent of the fathers and 54 percent of the mothers have less than a twelfth grade education indicate that the North Carolina community colleges and technical institutes are reaching a part of the lower socio-economic group who are unlikely to attend another type post-secondary institution. The relatively large number of students employed, 54 percent, may also be an indication that many of the students would not have been able to attend college away from home.

Although the community college is reaching a large number of persons in the lower income levels, there is still a large gap between the socio-economic background of the students and the socio-economic average of the community according to the following studies conducted in Florida and New York.

In a survey at Orange Coast Community College 47.2 percent of the students classified their parents as managers, proprietors, professional people, technicians, and sales representatives, but only 22.3 percent of the labor force in the Orange Coast Community was so employed.²

In a New York state technical institute two-thirds of the student body came from homes identified with the skilled and managerial-professional occupational groups, implying that the lower socio-economic groups are not represented proportionately in the institutions.³

The data in this study also indicate a wide variation in family and student income within an institution and an even larger variation among the institutions in North Carolina. Several of the institutions (26 of the 42 institutions surveyed) had ten percent or more of the student body whose parents had more than \$10,000 annual income. Four of the twenty-six institutions had over twenty percent of the students whose parents are in this higher income bracket.

1. "Organizing Higher Education," Higher Education for American Democracy Report of the President's Commission on Higher Education (Washington: Government Printing Office, 1947), Vol. III, pp. 6-7.

2. Bogue, The Community College, p. 58.

3. Ibid., p. 59.

A factor often closely associated with the socio-economic background of the student, especially the community college student, is the number of students who have part-time employment. Other factors, such as age, marital status, hours of course work, whether day or night student, certainly influence part-time employment and often may be of greater importance than the socio-economic background of the student's family. "Working your way through college" is a familiar phrase to all Americans. The advent of the community college has made this part of American folklore much more feasible for many young men and women.

As one reviews the literature concerning part-time employment of the community college students, he finds considerable variation from college to college. This variation can be noted from the following summary of three such studies: At Orange Coast College about 33 percent of the full-time students worked fewer than ten hours weekly during the school year. Thirty-four percent worked between ten and twenty hours weekly; 19 percent worked from twenty to thirty hours and 14 percent worked more than thirty hours weekly and carried a full load. In North Carolina more than half (53.5 percent) of the students are employed at least part-time.

One of the main objectives of this study is to determine whether the community colleges and technical institutes are reaching "all the people" of the state. The fact that the parents' income ranges from less than \$999 to over \$10,000 for the last twelve months indicates that the institutions are being utilized by people with varied economic backgrounds. A similar situation existed for student income for the last twelve months.

Over one half of the students (55 percent) noted that their parents' income for the last twelve months was above \$5000 and seventeen hundred and thirty students (15.5 percent) indicated that either their income or their parents' income during the last twelve months exceeded \$10,000. The figure is similar to the 15.7 percent of the southern families with an annual income of over \$10,000.²

1. "Who Came to Coalinga College?" (Mimeographed), (Coalinga: Office of Instruction and Records, 1958), quoted in James W. Thornton, Jr., The Community Junior College (New York: John Wiley and Sons, Inc., 1960), p. 154.

2. Mary F. Henson, Trends in the Income of Families and Persons in the United States, 1947-1964. (Washington: United States Department of Commerce, Technical Paper 17), p. 93.

Race, Sex, Marital Status

Other factors related to whether the community college institutions are reaching "all the people" of North Carolina are race, sex, and marital status.

All of the community college institutions accept students without regard to race, and the survey indicates that all institutions except one have some non-whites enrolled. The percentage of non-whites enrolled in the North Carolina community colleges and technical institutes is 13.0 compared to the 1960 non-white population of 25.4 percent in the total population of North Carolina.¹

In a comprehensive community college system where a major emphasis is placed on vocational as well as cultural benefits, the difference in occupational choices between the sexes and the differences in interests merit concern. According to the survey the male to female ratio in the North Carolina Community College System is 2 to 1, with considerable variation among curriculums.

In American colleges generally men students outnumber women students. In the fall of 1958 the total opening enrollment of degree-credit students in all institutions included 2,003,424 men and 1,064,993 women, or 65 percent and 35 percent respectively. In the junior colleges the degree-credit figures were 238,105 men and 131,858 women, almost exactly the same ratio. When all junior college students are considered, the inclusion of terminal registrants with the degree-credit students brings the ratio nearly to three men to one woman.²

Wattenbarger noted that in Florida's community junior colleges men outnumber women students three to two. This indicates that Florida's community junior colleges are being of particular service to young women who wish to continue beyond high school.³

1. United States Census of Population - 1960, North Carolina General Population Characteristics (Washington: United States Department of Commerce), Table D-1, 35-530.

2. "Opening Enrollment in Higher Education," Analytic Report Office of Education Circular No. 545. (Washington: Government Printing Office, 1959), p. 13.

3. Wattenbarger, Task Forces Study Five Areas of Florida's Junior College Growth, p. 17.

When all students enrolled for credit in the North Carolina community colleges and technical institutes are considered, the ratio is two men to one woman; however one-year programs have a slightly higher proportion of male students than do the two-year programs.

There was a time - not so many years ago - when marriage was cause for expulsion from college. However, it is not unusual today to find a married couple attending classes together or a married man or woman earning a degree while the spouse works.

Blocker et al state that although no national statistics are available, it is probably true that approximately one quarter of all the students in the two-year colleges are married.¹ Medsker's² figures derived from six junior colleges in California of 23 percent are in general agreement with Blocker's estimate and the 28 percent obtained in the North Carolina Survey.

It may be expected that the activity and social programs of the community college where one fifth or more of the students are married will be different from those in an institution where a married student is the exception.

Day or Evening Attendance

In general it may be said that "extended day" or "adult" classes are those offered primarily for students who attend only part-time and whose full-time occupation is something other than college study. Some classes parallel regular college offerings and carry credit toward degrees; others are offered without credit.

The catalog of Polk Junior College (Florida) describes their evening college as follows:

The evening college is an extension of the day program designed to provide the people of Polk County with an opportunity to extend their education, even though they are unable to attend college on a full-time basis.

1. Blocker, et al, The Two-Year College: A Social Synthesis, p. 108.

2. Medsker, The Junior College: Progress and Prospect, p. 45.

The evening college programs and faculty are substantially the same as those of the day college, although most of the classes meet only once a week. The sessions are designed to give the student exactly as much time for classroom instruction as those enrolled in day college. The textbooks are usually the same as those used in the day sessions.

It is possible to complete all work toward the associate degree by attending only evening classes.¹

In the United States, the public two-year college adult part-time enrollment averages 37 percent of the total enrollment although the hours attended are only a fraction of the attendance of regularly enrolled full-time students.²

McConnell found from a study of California state colleges that the late afternoon and evening programs, which are designed mainly for "limited" students taking fewer than six semester hours of course work, have been expanding more rapidly than the regular daytime courses. In 1950, 85 percent of the students were "regular" students, but by 1958 the percentage had decreased to 65. Many of the part-time students are young adults.³

When the data in this study concerning evening attendance are compared with existing studies, North Carolina has a much lower evening attendance than the national average of 37 percent.⁴ The large number of non-credit courses offered and lack of adequate credit courses in the North Carolina evening program may be partially responsible for the lower percentage.

McConnell⁵ reports that in the fall of 1957 the adult evening part-time students outnumbered full-time day students

1. Polk Junior College Bulletin, (Bartow, Florida), 1966-67, p. 31.

2. Thornton, The Community Junior College, p. 158.

3. McConnell, A General Pattern for American Public Higher Education, p. 56.

4. Thornton, The Community Junior College, p. 158.

5. McConnell, A General Pattern for American Public Higher Education, p. 56.

in California Junior Colleges by two to one. This is quite different from the North Carolina community college and technical institute student where the day student outnumbers the evening students by 5 to 1.

Geographic Characteristics

The region of the country and the state in which an individual lives have an important affect on the likelihood of his securing a college education. Communities, too, vary in the percentage of college age population who attend college. In some this variance is related to the socio-economic patterns. In others the difference is accounted for by the existence or non-existence of a college in the community.

Koos reported in 1944 that in communities with colleges a much greater proportion of high school graduates attended college than in communities in which no college existed. Moreover, substantially greater proportions of the population attended in communities where the college was tuition-free or charged a low fee, than in communities where the tuition fee was high.¹

Since the North Carolina community colleges and technical institutes are considered nonresident institutions the survey was designed to determine whether many of the students were "boarding" students and whether a large percentage of the students attended an institution located outside their home county. The results showed that 11 percent of the students were "boarding" students and 38 percent of the students attended an institution not located in their home county. The out-of-county students probably account for most of the students who travel more than 25 miles to class each day (14 percent), or a round trip of more than 50 miles per day. A majority of the students drive less than 10 miles to class.

1. Leonard V. Koos, "Local versus Regional Junior Colleges," School Review, Vol. 52 (November, 1944), p. 525.

Student Activities

Since most students in community colleges live off-campus (44.9 percent of North Carolina students live more than 10 miles from campus), it is important that the social life of the institution be geared to their needs and desires. The student who has completed his classes at noon will be unlikely to remain on campus for a late afternoon meeting. At a college where more than one fifth of the students are married and more than half are employed, clubs and student government may seem comparatively unimportant. For students in a residential college, even frivolous organized activities may provide a welcome diversion from the loneliness of a dormitory room, but students in a community college are likely to find any optional campus event an unwelcome distraction from their busy routines of classes, employment, study, family life, and commuting.¹

A further deterrent lies in the hidden or apparent cost of participation. To the student who is seeking higher education in spite of comparative poverty, the cost of a party dress, of tickets to several activities, of added gasoline or bus fare, and the loss of several hours of work prohibit unnecessary participation in activities. These students may also not participate because of fear of rejection by other students who have more time, money, and social experience. For such reasons only half of the community college students take part in student life, even under the best of circumstances.²

In a majority of the community colleges and technical institutes, athletics appear to be the most sought after social activity both by the students and by the community.

Student Plans

The relatively large number of the North Carolina students, 38 percent, planning to work toward a four-year degree indicates that some of the students enrolled in technical

1. General Education in Action (Washington: American Council on Education, 1952), p. 293.

2. Thornton, The Community Junior College, p. 262.

or vocational programs, normally considered terminal programs, do plan to attend a four year institution. The fact that 39 percent of the community college and technical institute students are classified as returning freshmen and that 26 percent are attending class less than 16 hours per week indicates that many of the students can be expected to attend classes longer than the normally required one or two years.

Seventy-nine percent of the students surveyed plan to be employed in North Carolina after graduation and 30 percent of the students indicated that they would not have attended another educational institution this year if the institution they are attending had not existed. Table 4 shows the number of institutions by percent of students who indicated that they would have attended another institution this year.

Table 4

Number of Institutions by Percent of Students
Who Indicated That They Would Have Attended
Another Institution This Year

Percent	Number of Institutions
Less than 40	4
40 - 49	1
50 - 59	8
60 - 69	9
70 - 79	18
80 or above	2

It has been said that the community college exists "to provide post-high school education for all the children of all the people and for all of the people too."¹

1. Thornton, The Community Junior College, p. 158.

The data in this chapter tend to substantiate the point made by various educators that there is no stereotyped student body in the two-year college. The diversity of age, sex, socio-economic background, marital status, geographic characteristics and other factors have several important implications.

Medsker summarizes the obligations that are of most importance to the community college with such a heterogeneous student body:

The diversity of programs in the junior college must provide opportunity for the widely varying levels of ability.

Counseling services are of special importance if students with different abilities and from many different backgrounds are to be assisted in ascertaining occupational and educational goals most appropriate to each of them.

Each college should accumulate a body of facts about its own student body which will serve as a guideline for educational policies and procedures. Much would be gained from cooperative studies by several institutions.

New types of data are needed, particularly on the motivation of students of varying abilities from lower social groups.¹

Hence it is imperative for the school to know what its students are like. Their characteristics should help to determine the nature of the school just as the school seeks to bring about the changes in the students.

Typical North Carolina Student

The typical North Carolina community college or technical institute student is between 19 and 22 years of age, a male, and of the white race. He is single, and lives with his parents. His parents do not have a twelfth grade education;

1. Medsker, The Junior College: Progress and Prospect, pp. 49-50.

however, they did have an income of more than \$5000 for the last twelve months.

The typical student attends day classes between 18 and 30 hours per week and is probably classified as a returning freshman. He travels less than 10 miles to class and is employed at least part-time.

After graduation the typical student plans to work in North Carolina but does not plan to work toward a four year degree. He would have attended another educational institution this year if the one he is now attending had not existed, although almost one third of his classmates would not have continued their education. The community college or technical institute he is attending is located in his home county.

In high school, the typical student was enrolled in the general curriculum and he was referred to the institution where he is now enrolled by another student or the high school counselor.

Chapter III

SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN COLLEGE TRANSFER, TECHNICAL, AND VOCATIONAL PROGRAMS

The three program areas in the North Carolina Community College System that offer credit are: college transfer, technical, and vocational. Twelve (community colleges) of the forty-two institutions offer all three programs whereas technical institutes do not offer the college transfer program.

Students enrolling in the vocational programs are not required to be a high school graduate; however, the student must be 18 years of age or older except where special permission is received from the local school superintendent. In some areas of vocational study a high school diploma is recommended. Students entering the college transfer or technical programs must have completed high school or have passed the high school equivalency test.

The college transfer program is patterned after the curriculums of the freshmen and sophomore years of the four-year colleges. Essentially this means a broad exposure to the liberal arts field and introductory courses for certain professional specializations. Some of the majors upon which students could make a start are: liberal arts, agriculture, business administration, pre-dentistry, pre-engineering, forestry, pre-law, pre-medicine pre-nursing, psychology, and education.

Students completing the program are expected to be able to transfer their earned college credits to a senior college or university and to enter the junior year in a curriculum leading to a bachelor's degree.

Technical programs are offered on a two-year basis and graduates are awarded an Associate in Applied Science degree. The major technology fields for which preparation is given are: agriculture, distribution, health, engineering, office, industry, and home economics. Included among the 50 different curriculums which are offered in these areas are: agribusiness, forestry, electronic data processing, printing administration, civil and sanitary technology, drafting

and design, electronics, dental hygiene, dental laboratory, associate degree nursing, fire administration, law enforcement, court reporting, commercial art, food processing, marine technology, and library technician.

A wide selection of trade, industrial, and service occupations are offered in the vocational programs. Training received in one of these programs can lead to skilled and semi-skilled jobs in business or industry. Among the 39 different curriculums offered in North Carolina institutions are: air conditioning and refrigeration, auto and diesel mechanic, building trades, dental assistant, drafting, machinist, medical laboratory assistant, practical nursing, radio and television servicing, and welding. After completing a program, which will usually be a year in length, a graduate will receive a certificate or diploma.

One can readily detect differences in the characteristics of the students in the different programs when Tables 5, 6, and 7, pages 37, 38, and 39 are compared. One of the most obvious differences is in the percent of college transfer and technical students employed full-time, 14 and 19 percent respectively, compared to the percent of vocational students employed full-time, 31 percent. The contrast between the programs for day students and evening students is also apparent. Ninety percent of the college transfer and 85 percent of the technical students attend day classes compared to 75 percent of the vocational students who attend day classes. A larger offering of evening vocational programs and the fact that more of the vocational students are employed probably account for the larger evening attendance.

The college transfer and technical students tend to be younger, according to the survey, than the vocational student. More than one half of the college transfer and technical students are 19 years of age or under. The younger age of the college transfer student is probably a major reason for the smaller number of married students, 20 percent. The percentages of technical and vocational students who are married are 25 and 40, respectively.

The annual parent income ranges from less than \$999 to over \$10,000 in each of the three program areas. The college transfer student's parent income for the last 12 months is higher than in either of the other programs as is evident in Table 8, page 40.

Table 5
Socio-Economic Characteristics of Students Enrolled in College Transfer Programs
(Number of Students - 2,632)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	2,632	100.0	Single	2,029	77.1	Yes	1,520	57.8
Technical	0	00.0	Married	514	19.5	No	1,090	41.4
Vocational	0	00.0	Divorced	40	01.5	Did not answer	22	00.8
Did not answer	0	00.0	Widowed	18	00.7	Employment status		
Curriculum	41	01.6	Separated	20	00.8	Unemployed	1,291	49.1
Agriculture	24	00.9	Did not answer	11	00.4	Employed part-time	967	36.7
Distribution	104	04.0	Highest grade completed			Employed full-time	355	13.5
Engineering	68	02.6	7-8	13	00.5	Did not answer	19	00.7
Health	13	00.5	9-11	28	01.1	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	148	05.6	12	1,594	60.6	Yes	2,015	76.6
Office	82	03.1	GED	98	03.7	No	553	21.0
Trade and industry	2,152	81.8	13	696	26.5	Did not answer	64	02.4
Did not answer			14	139	05.3	Estimated parent income for last 12 months		
Classification			15-16	23	00.9	Less than \$999	93	03.5
New freshman	722	27.4	Above 16	12	00.5	\$1000 - 1999	87	03.3
Returning freshman	1,009	38.4	Did not answer	29	01.1	\$2000 - 2999	117	04.4
Sophomore	835	31.7	High school curriculum			\$3000 - 3999	200	07.6
Did not answer	66	02.5	General	1,127	42.8	\$4000 - 4999	241	09.2
Attendance			Vocational	87	03.3	\$5000 - 5999	295	11.2
Day	2,376	90.3	Academic	1,344	51.1	\$6000 - 7499	379	14.4
Evening	236	09.0	Did not answer	74	02.8	\$7500 - 9999	413	15.7
Did not answer	20	00.7	Highest grade completed-father			Above \$10,000	559	21.2
Contact hours			1-6	322	12.2	Did not answer	248	09.4
1-6	198	07.5	Less than 7	440	16.7	Estimated student income for last 12 months		
7-11	202	07.7	7-8	625	23.7	Less than \$999	1,136	43.2
12-15	818	31.1	9-11	693	26.3	\$1000 - 1999	583	22.2
16-17	578	22.0	12	59	02.2	\$2000 - 2999	253	09.6
18-20	496	18.9	GED	86	03.3	\$3000 - 3999	143	05.4
21-25	189	07.2	13	114	04.3	\$4000 - 4999	96	03.6
26-30	35	01.3	14	116	04.4	\$5000 - 5999	70	02.7
Over 30	64	02.4	15-16	59	02.2	\$6000 - 7499	62	02.4
Did not answer	52	01.9	Above 16			\$7500 - 9999	31	01.2
Referred student to institution			Did not answer			Above \$10,000	33	01.3
Parent	576	21.9	Highest grade completed-mother			Did not answer	225	08.5
Employer	62	02.4	nother	167	06.3	Assistance received		
Other student	752	28.6	Less than 7	312	11.9	G. I. Bill	226	08.6
Radio, newspaper, TV	199	07.6	7-8	711	27.0	Scholarship	229	08.7
School recruiter	173	06.6	9-11	843	32.0	Vocational rehabilitation	43	01.6
High school counselor	625	23.8	12	63	02.4	Welfare agency	30	01.1
Welfare agency	32	01.2	GED	108	04.1	Other	599	22.8
Did not answer	213	08.1	13	145	05.5	Did not answer	1,505	57.2
Race			14	148	05.6	Plan to work toward 4 year degree		
White	2,391	90.9	15-16	81	03.1	Yes	2,270	86.2
Negro	169	06.4	Above 16	54	02.1	No	300	11.4
American Indian	35	01.3	Did not answer			Did not answer	62	02.4
Did not answer	37	01.4	Distance to class each day (one way)			Plan to be employed in North Carolina		
Age			Less than 1 mile			Yes	2,013	76.5
17	21	00.8	1-3	163	06.2	No	501	19.0
18	583	22.2	4-6	357	13.6	Did not answer	118	04.5
19	788	30.0	7-9	351	13.3	If answer to above is no check one of the following		
20-22	721	27.4	10-15	511	19.4	Enter military service	131	05.0
23-25	180	06.8	16-25	356	13.5	Marriage	75	02.8
26-29	124	04.7	26-30	173	06.6	Work in another state	269	10.2
30-39	148	05.6	Over 30	217	08.2	Other	64	02.4
40-49	40	01.5	Did not answer	17	00.6	Did not answer	2,093	79.5
Over 50	19	00.7	Residence while attending class					
Did not answer	8	00.3	Live with parents	1,600	60.8			
Sex			Live with spouse	469	17.8			
Male	1,776	67.5	Boarding student	344	13.1			
Female	844	32.1	Other	186	07.1			
Did not answer	12	00.4	Did not answer	33	01.3			

Table 6

Socio-Economic Characteristics of Students Enrolled in Technical Programs
(Number of Students - 5,243)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	0	00.0	Single	3,770	71.9	Yes	3,213	61.3
Technical	5,243	100.0	Married	1,310	25.0	No	1,992	38.0
Vocational	0	00.0	Divorced	64	01.2	Did not answer	38	00.7
Did not answer	0	00.0	Widowed	32	00.6	Employment status		
Curriculum			Separated	42	00.8	Unemployed	2,369	45.2
Agriculture	321	06.1	Did not answer	25	00.5	Employed part-time	1,837	35.0
Distribution	208	04.0	Highest grade completed			Employed full-time	991	18.9
Engineering	1,122	21.4	7-8	53	01.0	Did not answer	46	00.9
Health	151	02.9	9-11	144	02.7	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	9	00.2	12	3,266	62.3	Yes	3,698	70.5
Office	1,841	35.1	GED	232	04.4	No	1,419	27.1
Trade and industry	600	11.4	13	1,116	21.3	Estimated parent income for last 12 months	126	02.4
Did not answer	991	18.9	14	293	05.6	Less than \$999		
Classification			15-16	70	01.3	\$1000 - 1999	247	04.7
New freshman	1,688	32.2	Above 16	11	00.2	\$2000 - 2999	252	04.8
Returning freshman	1,925	36.7	Did not answer	58	01.1	\$3000 - 3999	271	05.2
Sophomore	1,475	28.1	High school curriculum			\$4000 - 4999	414	07.9
Did not answer	155	03.0	General	2,739	52.2	\$5000 - 5999	693	13.2
Attendance			Vocational	562	10.7	\$6000 - 7499	859	16.4
Day	4,441	84.7	Academic	1,757	33.5	Above \$10,000	717	13.7
Evening	777	14.8	Did not answer	185	03.5	Did not answer	736	14.0
Did not answer	25	00.5	Highest grade completed-			Estimated student income for last 12 months	502	09.6
Contact hours			father			Less than \$999		
1-6	368	07.0	Less than 7	724	13.8	\$1000 - 1999	2,250	42.9
7-11	266	05.1	7-8	1,104	21.1	\$2000 - 2999	1,043	19.9
12-15	440	08.4	9-11	1,381	26.3	\$3000 - 3999	543	10.4
16-17	369	07.0	12	1,231	23.5	\$4000 - 4999	337	06.4
18-20	1,115	21.3	GED	78	01.5	\$5000 - 5999	258	04.9
21-25	1,465	27.9	13	134	02.6	\$6000 - 7499	177	03.4
26-30	686	13.1	14	171	03.3	\$7500 - 9999	163	03.1
Over 30	426	08.1	15-16	152	02.9	Above \$10,000	96	01.8
Did not answer	108	02.1	Above 16	107	02.0	Did not answer	59	01.1
Referred student to institution			Did not answer	161	03.1	Assistance received	317	06.0
Parent	794	15.1	Highest grade completed-			G. I. Bill	464	08.8
Employer	260	05.0	mother	354	06.8	Scholarship	228	04.3
Other student	1,389	26.5	Less than 7	798	15.2	Vocational rehabilitation	150	02.9
Radio, newspaper, TV	557	10.6	7-8	1,657	31.6	Welfare agency	52	01.0
School recruiter	491	09.4	9-11	1,627	31.0	Other	1,539	29.4
High school counselor	1,426	27.2	12	84	01.6	Plan to work toward 4 year degree	2,810	53.6
Welfare agency	51	01.0	GED	178	03.4	Yes	1,429	27.3
Did not answer	275	05.2	13	166	03.2	No	3,577	68.2
Race			14	68	01.3	Did not answer	237	04.5
White	4,547	86.7	15-16	185	03.5	Plan to be employed in North Carolina		
Negro	595	11.3	Above 16	68	01.3	Yes	4,046	77.2
American Indian	37	00.7	Did not answer	126	02.4	No	1,023	19.5
Did not answer	64	01.2	Distance to class each day (one way)			Did not answer	174	03.3
Age			Less than 1 mile	340	06.5	If answer to above is no check one of the following		
17	43	00.8	1-3	1,074	20.5	Enter military service	337	06.4
18	1,040	19.8	4-6	985	18.8	Marriage	309	05.9
19	1,616	30.8	7-9	842	16.1	Work in another state	607	11.6
20-22	1,399	26.7	10-15	723	13.8	Other	3,782	72.2
23-25	379	07.2	16-25	235	04.5	Did not answer		
26-29	262	05.0	26-30	376	07.2			
30-39	323	06.2	Over 30	30	00.6			
40-49	135	02.6	Did not answer					
Over 50	29	00.6	Residence while attending class					
Did not answer	17	00.3	Live with parents	3,099	59.1			
Sex			Live with spouse	1,135	21.6			
Male	3,472	66.2	Boarding student	578	11.0			
Female	1,746	33.3	Other	379	07.2			
Did not answer	25	00.5	Did not answer	52	01.0			

Table 7

Socio-Economic Characteristics of Students Enrolled in Vocational Programs
(Number of Students - 3,220)

Program	Number of Students	Percent of Total	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	0	00.0	1,806	56.1	Yes	2,091	64.9
Technical	0	00.0	1,271	39.5	No	1,092	33.9
Vocational	3,220	100.0	48	01.5	Did not answer	37	01.1
Did not answer	0	00.0	33	01.0	Employment status		
Curriculum			51	01.6	Unemployed	1,409	43.8
Agriculture	46	01.4	11	00.3	Employed part-time	776	24.1
Distribution	19	00.6	109	03.4	Employed full-time	1,001	31.1
Engineering	38	01.2	360	11.2	Did not answer	34	01.1
Health	688	21.4	2,164	67.2	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	3	00.1	242	07.5	Yes		
Office	174	05.4	193	06.0	No		
Trade and industry	1,982	61.6	81	02.5	Estimated parent income for last 12 months		
Did not answer	270	08.4	29	00.9	Less than \$999	1,806	56.1
Classification			10	00.3	\$1000 - 1999	1,308	40.6
New freshman	1,348	41.9	32	01.0	\$2000 - 2999	106	03.3
Returning freshman	1,412	43.9	1,991	61.8	\$3000 - 3999		
Sophomore	322	10.0	509	15.8	\$4000 - 4999	256	08.0
Did not answer	138	04.3	566	17.6	\$5000 - 5999	203	06.3
Attendance			154	04.8	\$6000 - 7499	203	06.3
Day	2,422	75.2			\$7500 - 9999	312	09.7
Evening	777	24.1			Above \$10,000	353	11.0
Did not answer	21	00.7			Estimated student income for last 12 months	396	12.3
Contact hours					Less than \$999	406	12.6
1-6	230	07.1	648	20.1	\$1000 - 1999	325	10.1
7-11	136	04.2	762	23.7	\$2000 - 2999	304	09.4
12-15	254	07.9	849	26.4	\$3000 - 3999	462	14.3
16-17	99	03.1	568	17.6	\$4000 - 4999		
18-20	166	06.2	42	01.3	\$5000 - 5999		
21-25	222	06.9	30	00.9	\$6000 - 7499		
26-30	855	26.6	63	02.0	\$7500 - 9999		
Over 30	1,185	36.8	72	02.2	Above \$10,000		
Did not answer	73	02.3	42	01.3	Did not answer		
Referred student to institution			144	04.5	Estimated parent income for last 12 months		
Parent	384	11.9			Less than \$999	1,226	38.1
Employer	239	07.4			\$1000 - 1999	482	15.0
Other student	917	28.5			\$2000 - 2999	292	09.1
Radio, newspaper, TV	523	16.4			\$3000 - 3999	216	06.8
School recruiter	255	07.9			\$4000 - 4999	228	07.1
High school counselor	661	20.5			\$5000 - 5999	220	06.8
Welfare agency	31	01.0			\$6000 - 7499	162	05.0
Did not answer	205	06.4			\$7500 - 9999	79	02.5
Race					Above \$10,000	27	00.8
White	2,599	80.7			Did not answer	286	08.9
Negro	581	18.0			Assistance received		
American Indian	18	00.6			G. I. Bill	378	11.7
Did not answer	22	00.7			Scholarship	118	03.7
Age					Vocational rehabilitation	140	04.3
17	28	00.9			Welfare agency	54	01.7
18	562	17.5			Other	987	30.7
19	748	23.2			Did not answer	1,543	47.9
20-22	616	19.1			Plan to work toward 4 year degree		
23-25	277	08.6			Yes	515	16.0
26-29	251	07.8			No	2,534	78.7
30-39	443	13.6			Did not answer	171	05.3
40-49	244	07.6			Plan to be employed in North Carolina		
Over 50	46	01.4			Yes	2,690	83.5
Did not answer	5	00.2			No	421	13.1
Sex					Did not answer	109	03.4
Male	2,231	69.3			If answer to above is no check one of the following		
Female	971	30.2			Enter military service	206	06.4
Did not answer	18	00.5			Marriage	157	04.9
					Work in another state	235	07.3
					Other	114	03.5
					Did not answer	2,508	77.9

Table 8

Parent Income for the Three Program Areas

Parent Income	Transfer	Technical	Vocational
Above \$4000	72%	68%	55%
Above \$6000	51	44	32
Above \$10,000	21	14	09

The data show that more college transfer students drive over 10 miles to class (48 percent) than either the technical student (43 percent) or the vocational student (47 percent). Fewer of the college transfer students live in the county where they attend a community college or technical institute.

Another factor that is evident from this study is that 41 percent of the vocational and 27 percent of the technical students would not have attended another educational institution this year if this institution had not existed. Seventy-seven percent of the college transfer students say they would have attended an educational institution somewhere this year even if the one they attend had not existed. The higher family income, no doubt, is one of the reasons why a much larger percent of the college transfer students indicated they would have attended an educational institution this year even if this institution had not existed. Age of student, marital status, employment status, and education of parents would also be influential.

Eighty-six percent of the college transfer plan to work toward a four-year degree, compared to 27 percent and 16 percent of the technical and vocational students, respectively, who similarly plan to continue their formal education. It is interesting to note that the number of students in the vocational and technical curriculums who indicated that they plan to work toward a four-year degree is almost equal to the number of college transfer students (1944 and 2270 respectively). Fifty-three percent of all the students included in the survey indicated that they had been enrolled in a "general" high school curriculum. This is due, at least in part, to the limited offerings of some of the high schools in North Carolina. The data tend to indicate that a high school student enrolled in an academic program is more likely to enroll in the college transfer

program than in either of the occupational programs, technical or vocational. In contrast to the above statement the high school student enrolled in a vocational curriculum is more likely to enroll in an occupational program if he attends a community college.

The study indicates that 18 percent of the vocational students, 11 percent of the technical students, and 6 percent of the college transfer students are Negro, and that 84 percent of the vocational students plan to be employed in North Carolina compared to 77 percent for the technical and 77 percent for the college transfer students.

Typical College Transfer Student

The typical college transfer student in the North Carolina community colleges is a male, single, white, and either 18 or 19 years of age. He attends class between 12 and 17 hours per week, during the day and is probably classified as a returning freshman.

The student attends an institution in his home county, lives with his parents, and travels less than 15 miles to class each day. He is employed, although almost one half of his classmates are unemployed.

His mother completed the twelfth grade; however, his father probably did not. His parents' income for the last twelve months was above \$6000.

The college transfer student plans to work toward a four-year degree and plans to work in North Carolina after receiving the degree. He was enrolled in an academic curriculum in high school and was referred to the community college by either another student, the high school counselor, or his parents. The typical college transfer student would have attended another educational institution this year if the one he is now attending had not existed.

Typical Technical Student

The typical technical student in the North Carolina community college or technical institute is a male, white, single, and between 18 and 22 years of age. He attends class more than 18 hours per week, during the day and is probably

classified as a returning freshman.

The student attends an institution in his home county, lives with his parents, and travels less than 10 miles to class. He is employed, at least part-time. His parents' had an income of more than \$5000 during the last twelve months, even though they do not have a twelfth grade education.

After graduation the typical technical student plans to work in North Carolina, but does not plan to work toward a four-year degree, although more than one fourth of his classmates do. He would have continued his education at another institution this year if the one where he is now enrolled had not existed. The institution he is attending is located in his home county.

In high school, the typical student was enrolled in the general curriculum and he was referred to the community college or technical institute he is now attending by the high school counselor or by another student.

Typical Vocational Student

The typical vocational student in the North Carolina community colleges and technical institutes is a male, white, single, and between 18 and 22 years of age, although almost one third of his classmates are 26 years of age or older. He attends class more than 25 hours per week, during the day.

The student is enrolled in an institution located in his home county, lives with his parents, and travels less than 10 miles to class each day. He is employed, probably on a full-time basis. His parents did not complete the twelfth grade and their income for the last twelve months was more than \$4000.

The vocational student does not plan to work toward a four-year degree, but does plan to work in North Carolina after graduation. He was enrolled in a general curriculum in high school and was referred to the community college or technical institute by another student, a high school counselor or radio, newspaper, or television. The typical student would have attended another educational institution this year if the one he is now attending had not existed; however, more than one third of his classmates would not have continued their education.

Chapter IV

SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN OCCUPATIONAL CURRICULUMS

This section includes data from the seven curriculum areas (agriculture, distribution, engineering, health, home economics, office, and trades and industry) that compose the occupational programs of the North Carolina Community College System. The distribution of curriculums within the community college system is included as Table 9, page 44.

Of the students completing the survey sheet 76 percent were enrolled in occupational programs. The fact that 30 of the 42 institutions do not offer credit programs in other areas tends to explain the relatively large percentage of occupational students.

More students (2,677) are enrolled in the trades and industry curriculums than in any of the other curriculum areas. This is largely due to the number of trade and industry programs offered (189) in the state. The office curriculums are a close second both in number of students (2,174) and in number of programs (131).

The purpose of this section is to provide a socio-economic profile for each curriculum area. In order to construct this type of descriptive profile each area will be considered separately.

Agriculture

The primary objective of the agricultural offerings in the North Carolina community colleges and technical institutes is to train individuals with a good understanding of agriculture who can exercise sound judgment and perform competently such activities as selling, servicing, supervising, controlling, evaluating, diagnosing, building, operating, and testing in specialized situations.

Table 9

Distribution of Occupational Curriculums in the Forty-Two
North Carolina Community College Institutions

Institutions	Agriculture	Distribution	Engineering	Health	Home Economics	Office	Trades Industry	Total
Alamance			5	2		4	4	15
Ansonville							4	4
Asheville-Buncombe		1	5	1		4	7	18
Beaufort County				1		2	3	6
Caldwell				1		5	7	13
Cape Fear	1		4	1		2	6	14
Carteret County			1	1		2	3	7
Catawba Valley	2	1	5	1		5	6	20
Central Carolina	3		2	1		1	5	12
Cleveland County				1		2	3	6
College of Albemarle			2	1		1	3	7
Craven				1		2	3	6
Davidson County	2		2			3	6	13
Durham			3	3		6	3	15
Fayetteville	1		5	1		4	5	16
Forsyth	2		3	1		2	9	17
Gaston		1	7			2	8	18
Guilford			6	1		4	10	21
Haywood County	1			1		3	3	8
James Sprunt	2			1		5	7	15
Isothermal			3			2	2	7
Lenoir County	2		3			6	6	17
Marion-McDowell						2	3	5
Onslow				1		3	5	9
Pamlico County							2	2
Pitt	3		3	3		5	5	19
Randolph	1		1	1	1	1	5	10
Richmond			2	1		3	5	11
Robeson County	1			1		2	2	6
Rockingham			4	1		3	4	12
Rowan			5	1		3	8	17
Sampson County				1		4	1	6
Sandhills				1		6	4	11
Southeastern				2		5	5	12
Southwestern				1		2	4	7
Surry	1		2			2	2	7
Tri-County						1	3	4
W. W. Holding			3	3		4	6	16
Wayne	4		2	5		4	3	18
Western Piedmont			1	1		4	2	8
Wilkes	4	1	3	1		7	3	19
Wilson County	<u>1</u>	<u>—</u>	<u>5</u>	<u>1</u>	<u>—</u>	<u>3</u>	<u>4</u>	<u>14</u>
Total	31	4	87	45	1	131	189	410

Table 10

Socio-Economic Characteristics of Students Enrolled in Agricultural Curriculums
(Number of Students - 414)

	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
Program								
College transfer	41	09.9	Single	355	85.7	Yes	183	44.2
Technical	321	77.5	Married	48	11.6	No	230	55.6
Vocational	46	11.1	Divorced	5	01.2	Did not answer	1	00.2
Did not answer	6	01.4	Widowed	2	00.5	Employment status		
Curriculum			Separated	2	00.5	Unemployed	221	53.4
Agriculture	414	100.0	Did not answer	2	00.5	Employed part-time	144	34.8
Distribution	0	00.0	Highest grade completed			Employed full-time	45	10.9
Engineering	0	00.0	7-8	5	01.2	Did not answer	4	01.0
Health	0	00.0	9-11	2	00.5	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	00.0	12	291	70.3	Yes	305	73.7
Office	0	00.0	GED	8	01.9	No	101	24.4
Trade and industry	0	00.0	13	83	20.0	Did not answer	8	01.9
Did not answer	0	00.0	14	16	03.9	Estimated parent income for last 12 months		
Classification			15-16	3	00.7	Less than \$999		
New freshman	151	36.5	Above 16	2	00.5	\$1000 - 1999	12	02.9
Returning freshman	136	32.9	Did not answer	2	00.5	\$2000 - 2999	14	03.4
Sophomore	119	28.7	High school curriculum	4	01.0	\$3000 - 3999	37	08.9
Did not answer	8	01.9	General	247	59.7	\$4000 - 4999	28	06.8
Attendance			Vocational	72	17.4	\$5000 - 5999	50	12.1
Day	381	92.0	Academic	87	21.0	\$6000 - 7499	70	16.9
Evening	32	07.7	Did not answer	8	01.9	\$7500 - 9999	61	14.7
Contact hours			Highest grade completed-			Above \$10,000	49	11.8
1-6	5	01.2	father	56	13.5	Did not answer	54	13.0
7-11	10	02.4	Less than 7	107	25.8	Estimated student income for last 12 months	39	09.4
12-15	30	07.2	7-8	115	27.8	Less than \$999		
16-17	22	05.3	9-11	13	03.1	\$1000 - 1999	184	44.4
18-20	122	29.5	GED	5	01.2	\$2000 - 2999	113	27.3
21-25	183	44.2	13	18	04.3	\$3000 - 3999	47	11.4
26-30	16	03.9	14	10	02.4	\$4000 - 4999	21	05.1
Over 30	21	05.1	15-16	4	01.0	\$5000 - 5999	12	02.9
Did not answer	5	01.2	Above 16	18	04.3	\$6000 - 7499	5	01.2
Referred student to institution			Did not answer	10	02.4	\$7500 - 9999	1	00.2
Parent	63	15.2	Highest grade completed-	4	01.0	Above \$10,000	0	00.0
Employer	11	02.7	mother	26	06.3	Did not answer	4	01.0
Other student	96	23.2	Less than 7	46	11.1	Assistance received	27	06.5
Radio, newspaper, TV	18	04.3	7-8	132	31.9	G. I. Bill		
School recruiter	75	18.1	9-11	139	33.6	Scholarship	38	09.2
High school counselor	123	29.7	12	8	01.9	Vocational rehabilitation	16	03.9
Welfare agency	7	01.7	13	16	03.9	Welfare agency	12	02.9
Did not answer	21	05.1	14	9	02.2	Other	3	00.7
Race			15-16	23	05.6	Did not answer	112	27.1
White	378	91.3	Above 16	11	02.7	Plan to work toward 4 year degree	233	56.3
Negro	22	05.3	Did not answer	4	01.0	Yes		
American Indian	6	01.4	Distance to class each day (one way)			No	116	28.0
Did not answer	8	01.9	Less than 1 mile	15	03.6	Did not answer	285	68.8
Age			1-3	78	18.8	Plan to work toward 4 year degree	13	03.1
17	3	00.7	4-6	55	13.3	Yes		
18	93	22.5	7-9	43	10.4	No	314	75.8
19	144	34.8	10-15	72	17.4	Did not answer	87	21.0
20-22	128	30.9	16-25	70	16.9	Plan to be employed in North Carolina	13	03.1
23-25	24	05.8	26-30	31	07.5	Yes		
26-29	7	01.7	Over 30	49	11.8	No	26	06.3
30-39	5	01.4	Did not answer	1	00.2	Did not answer	26	06.3
40-49	3	00.7	Residence while attending class			If answer to above is no check one of the following	52	12.6
Over 50	4	01.0	Live with parents	269	65.0	Enter military service	11	02.7
Did not answer	2	00.5	Live with spouse	35	08.5	Marriage	299	72.2
Sex			Boarding student	62	15.0	Work in another state		
Male	373	90.1	Other	45	10.9	Did not answer		
Female	38	09.2	Did not answer	3	00.7			
Did not answer	3	00.7						

Areas where agricultural technicians are needed include supply and equipment firms, feed and fertilizer plants, horticultural enterprises, poultry hatcheries, agricultural chemical firms, agricultural research installations, food processing plants, forest services and industries, soil and water conservation districts, veterinary hospitals, and large, specialized farm operations.

In order to meet the needs for technicians in agriculture sixteen community colleges and technical institutes offered thirty-one agricultural programs during 1968. The offerings included curriculums in agricultural business, agricultural chemical, agricultural equipment, agricultural research, food processing technology, forest management, ornamental horticulture, poultry and livestock, soil and water conservation, veterinary medical technology, and machinery mechanics.

Most of the agriculture curriculums are two years in length and offer the Associate in Applied Science degree; however one year programs are preferred in some locations. A graduate of a one-year program is awarded a diploma.

CHARACTERISTICS OF STUDENTS

Table 10, page 45 shows the results of a study in which 414 agricultural students participated. According to the survey 66 percent of the agricultural students are between 19 and 22 years of age, 90 percent are male, 91 percent are of the white race and 86 percent are single.

Sixty percent of the agricultural students were enrolled in a general curriculum in high school; however 17 percent of the students were enrolled in a vocational curriculum. According to Table 10 the high school counselor was credited with influencing 12 percent more students to enroll in an agricultural program than the community college or technical institute recruiters.

Almost half of the students, 46 percent, live within ten miles of the institution while 12 percent drive more than 30 miles or a round trip of 60 miles. Fifteen percent of the students are considered boarding students.

A majority of the students, 83 percent, attend class eighteen or more hours per week even though 46 percent of the students are employed - at least part-time. Twenty-four percent of the students indicated that they would not have

attended another educational institution this year if the one they are now attending had not existed.

Seventy-six percent of the agricultural students plan to work in North Carolina after graduation and 28 percent plan to work toward a four-year degree. Less than one half of the students, 44 percent, are attending an educational institution located in their home county. Income and educational background of the agricultural students' parents correspond rather closely with that of the typical North Carolina community college or technical institute student. One-fifth of the parents had an income last year of less than \$4000; whereas 13 percent of the parents had an income of more than \$10,000.

TYPICAL STUDENT

The data indicate that the typical North Carolina community college or technical institute student enrolled in agriculture is a male, of the white race, single and between 19 and 22 years of age.

He was probably enrolled in the general curriculum in high school; however, he was more likely to have been enrolled in a vocational curriculum than any of the other community college or technical institute students except those enrolled in home economics.

The agricultural student travels farther to class than most of the other students and attends day classes 21 to 25 hours a week. He may work part-time, but he is likely to be unemployed. He plans to work in North Carolina after graduation and does not plan to work toward a four-year degree.

He enrolled in the institution he is now attending because the counselor, another student, or a recruiter from the community college or technical institute encouraged him to do so. He has already attended school longer than either of his parents. His parents' income for the last twelve months was between \$5000 and \$7500. He is more likely to be an out-of-county student than any of the other occupational students.

Distribution

Occupations in distribution comprise a relatively small but important number of workers in the labor force. Persons employed in these positions are usually responsible for supervisory tasks of service-oriented occupations as well as some production - focused fields of work.

Distribution programs offered in community colleges and technical institutes concentrate on specialized programs with specific orientation to preparation for middle management positions.

Four of the forty-two community colleges and technical institutes that participated in the study are currently (1968) granting either an Associate in Applied Science degree or a Vocational diploma in distribution education. These curriculums include hotel and motel management technology, traffic and transportation technology, and building materials management and sales.

CHARACTERISTICS OF STUDENTS

Table 11, page 49 shows the results of a study in which 256 distribution students participated. According to the study 59 percent of the students enrolled in the distribution curriculums in the North Carolina System are between 19 and 22 years of age, 75 percent are male, 87 percent are of the white race, and 75 percent are single.

A majority of the students, 87 percent, were enrolled in the general or academic curriculums in high school and 64 percent were referred to the institution they are now attending by the high school counselor or other students. Twenty-five percent of the students indicated they would not have attended another educational institution this year if the one they are now attending had not existed.

Of the students in the distribution curriculums, 51 percent are classified as returning freshmen, and 34 percent plan to work toward a four year degree. More than one-half of the students, 62 percent, live within 10 miles of the educational institution and 56 percent attend class eighteen hours or more per week. Sixty-six percent of those participating in the study are employed, and 79 percent plan to work in North Carolina after graduation.

Table 11

Socio-Economic Characteristics of Students Enrolled in Distribution Curriculums
(Number of Students - 256)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	24	09.4	Single	190	74.2	Yes	166	64.8
Technical	208	81.3	Married	59	23.0	No	84	32.8
Vocational	19	07.4	Divorced	1	00.4	Did not answer	6	02.3
Did not answer	5	02.0	Widowed	1	00.4	Employment status		
Curriculum			Separated	2	00.8	Unemployed	85	33.2
Agriculture	0	00.0	Did not answer	3	01.2	Employed part-time	116	45.3
Distribution	256	100.0	Highest grade completed			Employed full-time	53	20.7
Engineering	0	00.0	7-8	3	01.2	Did not answer	2	00.8
Health	0	00.0	9-11	5	02.0	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	00.0	12	157	61.3	Yes	185	72.3
Office	0	00.0	GED	11	04.3	No	63	24.6
Trade and industry	0	00.0	13	59	23.0	Did not answer	8	03.1
Did not answer	0	00.0	14	16	06.3	Estimated parent income for last 12 months		
Classification			15-16	1	00.4	Less than \$999	12	04.7
New freshman	51	19.9	Above 16	1	00.4	\$1000 - 1999	15	05.9
Returning freshman	130	50.8	Did not answer	3	01.2	\$2000 - 2999	12	04.7
Sophomore	71	27.7	High school curriculum			\$3000 - 3999	22	08.6
Did not answer	4	01.6	General	140	54.7	\$4000 - 4999	27	10.5
Attendance			Vocational	29	11.3	\$5000 - 5999	30	11.7
Day	210	82.0	Academic	82	32.0	\$6000 - 7499	43	16.8
Evening	45	17.6	Did not answer	5	02.0	\$7500 - 9999	36	14.1
Did not answer	1	0.4	Highest grade completed-			Above \$10,000	31	12.1
Contact hours			Father	35	13.7	Did not answer	28	10.9
1-6	30	11.7	Less than 7	7	02.7	Estimated student income for last 12 months		
7-11	17	06.6	7-8	52	20.3	Less than \$999	92	35.9
12-15	35	13.7	9-11	80	31.3	\$1000 - 1999	53	20.7
16-17	27	10.5	12	53	20.7	\$2000 - 2999	31	12.1
18-20	79	30.9	GED	3	01.2	\$3000 - 3999	19	07.4
21-25	37	14.5	13	7	02.7	\$4000 - 4999	16	06.3
26-30	8	03.1	14	7	02.7	\$5000 - 5999	12	04.7
Over 30	18	07.0	15-16	9	03.5	\$6000 - 7499	9	03.5
Did not answer	5	02.0	Above 16	3	01.2	\$7500 - 9999	1	00.4
Referred student to institution			Did not answer	7	02.7	Above \$10,000	17	06.6
Parent	44	17.2	Highest grade completed-			Did not answer		
Employer	8	03.1	mother	26	10.2	Assistance received		
Other student	82	32.0	Less than 7	38	14.8	G. I. Bill	19	07.4
Radio, newspaper, TV	15	05.9	7-8	89	34.8	Scholarship	10	03.9
School recruiter	11	04.3	9-11	72	28.1	Vocational rehabilitation	12	04.7
High school counselor	83	32.4	12	2	00.8	Welfare agency	3	01.2
Welfare agency	2	00.8	GED	7	02.7	Other	65	25.4
Did not answer	11	04.3	13	8	03.1	Did not answer	147	57.4
Race			14	5	02.0	Plan to work toward 4 year degree		
White	222	86.7	15-16	25	09.9	Yes	86	33.6
Negro	29	11.3	Above 16	54	21.1	No	157	61.3
American Indian	1	00.4	Did not answer	46	18.0	Did not answer	13	05.1
Did not answer	4	01.6	Distance to class each day (one way)			Plan to be employed in North Carolina		
Age			Less than 1 mile	25	09.9	Yes	201	78.5
17	5	02.0	1-3	54	21.1	No	49	19.1
18	52	20.3	4-6	33	12.9	Did not answer	6	02.3
19	79	30.9	7-9	32	12.5	Plan to be employed in North Carolina		
20-22	72	28.1	10-15	29	11.3	Yes	201	78.5
23-25	18	07.0	16-25	17	06.6	No	49	19.1
26-29	8	03.1	26-30	18	07.0	Did not answer	6	02.3
30-39	14	05.5	Over 30	2	00.8	If answer to above is no check one of the following		
40-49	6	02.3	Did not answer	174	68.0	Enter military service	23	09.0
Over 50	0	00.0	Residence while attending class	50	19.5	Marriage	16	06.3
Did not answer	2	00.8	Live with parents	13	05.1	Work in another state	27	10.5
Sex			Live with spouse	14	05.5	Other	6	02.3
Male	192	75.0	Boarding student	5	02.0	Did not answer	184	71.9
Female	60	23.4	Other					
Did not answer	4	01.6	Did not answer					

A relatively high percentage of the parents, compared to the other occupational curriculum areas, did not complete the twelfth grade. The survey shows that 65 percent of the fathers and 60 percent of the mothers have less than a twelfth grade education. Almost one-fourth, 24 percent, of the parents had an income of less than \$4000 for the last twelve months.

TYPICAL STUDENT

The data indicate that the typical North Carolina community college or technical institute student enrolled in distribution is between 19 and 22 years of age, a male, of the white race, and single.

The typical student was enrolled in the general or academic curriculum in high school and was referred to the institution he is now attending by either the high school counselor or by another student. He would have attended another educational institution this year if the one he is now attending had not existed, although one fourth of his classmates would not have attended another educational institution.

The student lives within ten miles of the institution he is attending which is located in his home county. Even though the typical student is employed he attends class 18 or more hours a week. If he does not work toward a four-year degree, he plans to work in North Carolina after he graduates from the community college or technical institute.

Engineering

The training of engineering technicians is a comparatively new addition to the total field of occupational education; however, the rapidly changing complexion of science, industry, and education has focused a great deal of attention on the technician as a "key" person filling the gap which has been gradually widening between the professional engineer and scientist on the one hand and the skilled tradesman on the other.

The engineering curriculums are two years in length and lead to the Associate in Applied Science degree. Among the engineering curriculums offered in the North Carolina community colleges and technical institutes are chemical and civil engineering, air conditioning and refrigeration engineering

Table 7

Characteristics of Students Enrolled in Vocational Programs
(Number of Students = 3,220)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	6	0.2	Single	1,076	33.4	Yes	2,071	64.3
Technical	6	0.2	Married	1,071	33.3	No	1,149	35.7
Vocational	3,220	100.0	Divorced	46	1.4	Did not answer	3	0.1
Did not answer	6	0.2	Widowed	33	1.0	Employment status	3	0.1
Curriculum	46	1.4	Separated	11	0.3	Unemployed	1,076	33.4
Agriculture	12	0.4	Did not answer	11	0.3	Employed part-time	1,149	35.7
Distribution	34	1.1	Highest grade completed	3	0.1	Employed full-time	1,149	35.7
Engineering	108	3.4	7-8	1,076	33.4	Did not answer	3	0.1
Health	1	0.0	9-11	3	0.1	Would you have attended another educational institution this year if this institution had not existed	3	0.1
Home Economics	174	5.4	12	2,071	64.3	Yes	1,149	35.7
Office	1,076	33.4	GED	33	1.0	No	1,149	35.7
Trade and industry	277	8.6	13	33	1.0	Estimated parent income for last 12 months	3	0.1
Did not answer	277	8.6	14	33	1.0	Less than \$999	3	0.1
Classification	1,076	33.4	15-16	33	1.0	\$1000 - 1999	3	0.1
New freshman	1,076	33.4	Above 16	33	1.0	\$2000 - 2999	3	0.1
Returning freshman	1,076	33.4	Did not answer	33	1.0	\$3000 - 3999	3	0.1
Sophomore	332	10.3	Highest school curriculum	33	1.0	\$4000 - 4999	3	0.1
Did not answer	332	10.3	General	1,076	33.4	\$5000 - 5999	3	0.1
Attendance	1,076	33.4	Vocational	33	1.0	\$6000 - 7499	3	0.1
Day	2,071	64.3	Academic	33	1.0	\$7500 - 9999	3	0.1
Evening	777	24.1	Did not answer	33	1.0	Above \$10,000	3	0.1
Did not answer	21	0.7	Highest grade completed-father	33	1.0	Did not answer	3	0.1
Contact hours	21	0.7	Less than 7	33	1.0	Estimated student income for last 12 months	3	0.1
1-6	21	0.7	7-8	33	1.0	Less than \$999	3	0.1
7-11	1,076	33.4	9-11	33	1.0	\$1000 - 1999	3	0.1
12-15	1,076	33.4	12	33	1.0	\$2000 - 2999	3	0.1
16-17	1,076	33.4	13	33	1.0	\$3000 - 3999	3	0.1
18-20	1,076	33.4	14	33	1.0	\$4000 - 4999	3	0.1
21-25	1,076	33.4	15-16	33	1.0	\$5000 - 5999	3	0.1
26-30	1,076	33.4	Above 16	33	1.0	\$6000 - 7499	3	0.1
Over 30	1,076	33.4	Did not answer	33	1.0	\$7500 - 9999	3	0.1
Did not answer	1,076	33.4	Highest grade completed-mother	33	1.0	Above \$10,000	3	0.1
Referred student to institution	33	1.0	Less than 7	33	1.0	Did not answer	3	0.1
Parent	33	1.0	7-8	33	1.0	Estimated student income for last 12 months	3	0.1
Employer	33	1.0	9-11	33	1.0	Less than \$999	3	0.1
Other student	33	1.0	12	33	1.0	\$1000 - 1999	3	0.1
Radio, newspaper, TV	33	1.0	13	33	1.0	\$2000 - 2999	3	0.1
School recruiter	33	1.0	14	33	1.0	\$3000 - 3999	3	0.1
High school counselor	33	1.0	15-16	33	1.0	\$4000 - 4999	3	0.1
Welfare agency	33	1.0	Above 16	33	1.0	\$5000 - 5999	3	0.1
Did not answer	33	1.0	Did not answer	33	1.0	\$6000 - 7499	3	0.1
Race	33	1.0	Highest grade completed-father	33	1.0	\$7500 - 9999	3	0.1
White	33	1.0	Less than 7	33	1.0	Above \$10,000	3	0.1
Negro	33	1.0	7-8	33	1.0	Did not answer	3	0.1
American Indian	33	1.0	9-11	33	1.0	Assistance received	3	0.1
Did not answer	33	1.0	12	33	1.0	O. I. Bill	3	0.1
Age	33	1.0	13	33	1.0	Scholarship	3	0.1
17	33	1.0	14	33	1.0	Vocational rehabilitation	3	0.1
18	33	1.0	15-16	33	1.0	Welfare agency	3	0.1
19	33	1.0	Above 16	33	1.0	Other	3	0.1
20-22	33	1.0	Did not answer	33	1.0	Did not answer	3	0.1
23-25	33	1.0	Distance to class each day (one way)	33	1.0	Plan to work toward 4 year degree	3	0.1
26-29	33	1.0	Less than 1 mile	33	1.0	Yes	3	0.1
30-39	33	1.0	1-3	33	1.0	No	3	0.1
40-49	33	1.0	4-6	33	1.0	Did not answer	3	0.1
Over 50	33	1.0	7-9	33	1.0	Plan to be employed in North Carolina	3	0.1
Did not answer	33	1.0	10-15	33	1.0	Yes	3	0.1
Sex	33	1.0	16-25	33	1.0	No	3	0.1
Male	33	1.0	26-30	33	1.0	Did not answer	3	0.1
Female	33	1.0	Over 30	33	1.0	If answer to above is no check one of the following	3	0.1
Did not answer	33	1.0	Did not answer	33	1.0	Enter military service	3	0.1
			Residence while attending class	33	1.0	Marriage	3	0.1
			Live with parents	33	1.0	Work in another state	3	0.1
			Live with spouse	33	1.0	Other	3	0.1
			Boarding student	33	1.0	Did not answer	3	0.1
			Other	33	1.0			
			Did not answer	33	1.0			

Table 8

Parent Income for the Three Program Areas

Parent Income	Transfer	Technical	Vocational
Above \$4000	72%	68%	55%
Above \$6000	51	44	32
Above \$10,000	21	14	09

The data show that more college transfer students drive over 10 miles to class (48 percent) than either the technical student (43 percent) or the vocational student (47 percent). Fewer of the college transfer students live in the county where they attend a community college or technical institute.

Another factor that is evident from this study is that 41 percent of the vocational and 27 percent of the technical students would not have attended another educational institution this year if this institution had not existed. Seventy-seven percent of the college transfer students say they would have attended an educational institution somewhere this year even if the one they attend had not existed. The higher family income, no doubt, is one of the reasons why a much larger percent of the college transfer students indicated they would have attended an educational institution this year even if this institution had not existed. Age of student, marital status, employment status, and education of parents would also be influential.

Eighty-six percent of the college transfer plan to work toward a four-year degree, compared to 27 percent and 16 percent of the technical and vocational students, respectively, who similarly plan to continue their formal education. It is interesting to note that the number of students in the vocational and technical curriculums who indicated that they plan to work toward a four-year degree is almost equal to the number of college transfer students (1944 and 2270 respectively). Fifty-three percent of all the students included in the survey indicated that they had been enrolled in a "general" high school curriculum. This is due, at least in part, to the limited offerings of some of the high schools in North Carolina. The data tend to indicate that a high school student enrolled in an academic program is more likely to enroll in the college transfer

program than in either of the occupational programs, technical or vocational. In contrast to the above statement the high school student enrolled in a vocational curriculum is more likely to enroll in an occupational program if he attends a community college.

The study indicates that 18 percent of the vocational students, 11 percent of the technical students, and 6 percent of the college transfer students are Negro, and that 84 percent of the vocational students plan to be employed in North Carolina compared to 77 percent for the technical and 77 percent for the college transfer students.

Typical College Transfer Student

The typical college transfer student in the North Carolina community colleges is a male, single, white, and either 18 or 19 years of age. He attends class between 12 and 17 hours per week, during the day and is probably classified as a returning freshman.

The student attends an institution in his home county, lives with his parents, and travels less than 15 miles to class each day. He is employed, although almost one half of his classmates are unemployed.

His mother completed the twelfth grade; however, his father probably did not. His parents' income for the last twelve months was above \$6000.

The college transfer student plans to work toward a four-year degree and plans to work in North Carolina after receiving the degree. He was enrolled in an academic curriculum in high school and was referred to the community college by either another student, the high school counselor, or his parents. The typical college transfer student would have attended another educational institution this year if the one he is now attending had not existed.

Typical Technical Student

The typical technical student in the North Carolina community college or technical institute is a male, white, single, and between 18 and 22 years of age. He attends class more than 18 hours per week, during the day and is probably

classified as a returning freshman.

The student attends an institution in his home county, lives with his parents, and travels less than 10 miles to class. He is employed, at least part-time. His parents' had an income of more than \$5000 during the last twelve months, even though they do not have a twelfth grade education.

After graduation the typical technical student plans to work in North Carolina, but does not plan to work toward a four-year degree, although more than one fourth of his classmates do. He would have continued his education at another institution this year if the one where he is now enrolled had not existed. The institution he is attending is located in his home county.

In high school, the typical student was enrolled in the general curriculum and he was referred to the community college or technical institute he is now attending by the high school counselor or by another student.

Typical Vocational Student

The typical vocational student in the North Carolina community colleges and technical institutes is a male, white, single, and between 18 and 22 years of age, although almost one third of his classmates are 26 years of age or older. He attends class more than 25 hours per week, during the day.

The student is enrolled in an institution located in his home county, lives with his parents, and travels less than 10 miles to class each day. He is employed, probably on a full-time basis. His parents did not complete the twelfth grade and their income for the last twelve months was more than \$4000.

The vocational student does not plan to work toward a four-year degree, but does plan to work in North Carolina after graduation. He was enrolled in a general curriculum in high school and was referred to the community college or technical institute by another student, a high school counselor or radio, newspaper, or television. The typical student would have attended another educational institution this year if the one he is now attending had not existed; however, more than one third of his classmates would not have continued their education.

Chapter IV

SOCIO-ECONOMIC CHARACTERISTICS OF STUDENTS ENROLLED IN OCCUPATIONAL CURRICULUMS

This section includes data from the seven curriculum areas (agriculture, distribution, engineering, health, home economics, office, and trades and industry) that compose the occupational programs of the North Carolina Community College System. The distribution of curriculums within the community college system is included as Table 9, page 44.

Of the students completing the survey sheet 76 percent were enrolled in occupational programs. The fact that 30 of the 42 institutions do not offer credit programs in other areas tends to explain the relatively large percentage of occupational students.

More students (2,677) are enrolled in the trades and industry curriculums than in any of the other curriculum areas. This is largely due to the number of trade and industry programs offered (189) in the state. The office curriculums are a close second both in number of students (2,174) and in number of programs (131).

The purpose of this section is to provide a socio-economic profile for each curriculum area. In order to construct this type of descriptive profile each area will be considered separately.

Agriculture

The primary objective of the agricultural offerings in the North Carolina community colleges and technical institutes is to train individuals with a good understanding of agriculture who can exercise sound judgment and perform competently such activities as selling, servicing, supervising, controlling, evaluating, diagnosing, building, operating, and testing in specialized situations.

Table 9

Distribution of Occupational Curriculums in the Forty-Two
North Carolina Community College Institutions

Institutions	Agriculture	Distribution	Engineering	Health	Home Economics	Office	Trades Industry	Total
Alamance			5	2		4	4	15
Ansonville							4	4
Asheville-Buncombe		1	5	1		4	7	18
Beaufort County				1		2	3	6
Caldwell				1		5	7	13
Cape Fear	1		4	1		2	6	14
Carteret County			1	1		2	3	7
Catawba Valley	2	1	5	1		5	6	20
Central Carolina	3		2	1		1	5	12
Cleveland County				1		2	3	6
College of Albemarle			2	1		1	3	7
Creven				1		2	3	6
Davidson County	2		2			3	6	13
Durham			3	3		6	3	15
Fayetteville	1		5	1		4	5	16
Forsyth	2		3	1		2		17
Gaston		1	7			2	8	18
Guilford			6	1		4	10	21
Haywood County	1			1		3	3	8
James Sprunt	2			1		5	7	15
Isothermal			3			2	2	7
Lenoir County	2		3			6	6	17
Marion-McDowell						2	3	5
Onslow				1		3	5	9
Pallico County							2	2
Pitt	3		3	3		5	5	19
Randolph	2		1	1	1	1	5	10
Richmond			2	1		3	5	11
Robert - County	1			1		2	2	6
Rockingham			4	1		3	4	12
Rowan			5	1		3	8	17
Sampson County				1		4	1	6
Sandhills				1		6	4	11
Southeastern				2		5	5	12
Southwestern				1		2	4	7
Surry	1		2			2	2	7
Tri-County						1	3	4
W. W. Holding			3	3		4	5	15
Wayne	4		2	5		4	3	18
Western Piedmont			1	1		4	2	8
Wilkes	4	1	3	1		7	3	19
Wilson County	<u>1</u>	<u>—</u>	<u>5</u>	<u>1</u>	<u>—</u>	<u>3</u>	<u>4</u>	<u>14</u>
Total	31	4	87	45	1	131	109	480

Table 10
Socio-Economic Characteristics of Students Enrolled in Agricultural Curricula
(Number of Students - 414)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	41	9.9	Single	355	85.7	Yes	103	44.2
Vocational	321	77.5	Married	48	11.6	No	220	52.7
Did not answer	46	11.1	Divorced	5	1.2	Did not answer	1	0.2
Curriculum	414	100.0	Widowed	2	0.5	Employment status	221	53.4
Agriculture	0	0.0	Separated	2	0.5	Unemployed	144	34.8
Distribution	0	0.0	Did not answer	2	0.5	Employed part-time	45	10.9
Engineering	0	0.0	Highest grade completed	5	1.2	Employed full-time	4	0.9
Health	0	0.0	7-8	291	70.3	Did not answer		
Home Economics	0	0.0	9-11	8	1.9	Would you have attended another educational institution this year if this institution had not existed		
Office	0	0.0	12	16	3.9	Yes	305	73.7
Trade and industry	0	0.0	13	2	0.5	No	101	24.4
Did not answer	0	0.0	14	2	0.5	Did not answer	8	1.9
Classification	151	36.5	15-16	2	0.5	Estimated parent income for last 12 months		
New freshman	136	32.9	Above 16	4	1.0	Less than \$999	12	2.9
Returning freshman	119	28.7	Did not answer	72	17.4	\$1000 - 1999	14	3.4
Sophomore	8	0.2	High school curriculum	87	21.0	\$2000 - 2999	37	8.9
Did not answer	381	92.0	General	8	1.9	\$3000 - 3999	20	4.8
Attendance	32	7.7	Vocational			\$4000 - 4999	50	12.1
Day	1	0.2	Academic	56	13.5	\$5000 - 5999	70	16.9
Evening	30	7.2	Did not answer	81	19.6	\$6000 - 7499	41	10.0
Did not answer	22	5.3	Highest grade completed-father	107	25.8	\$7500 - 9999	49	11.8
Contact hours	183	44.2	Less than 7	5	1.2	Above \$10,000	24	5.8
1-6	16	3.9	7-8	13	3.1	Did not answer	29	7.0
7-11	21	5.1	9-11	18	4.3	Estimated student income for last 12 months		
12-15	5	1.2	12	10	2.4	Less than \$999	104	24.4
16-17	22	5.3	13	4	1.0	\$1000 - 1999	113	27.3
18-20	16	3.9	14	15	3.6	\$2000 - 2999	47	11.4
21-25	21	5.1	15-16	18	4.3	\$3000 - 3999	21	5.1
26-30	21	5.1	Above 16	10	2.4	\$4000 - 4999	12	2.9
Over 30	5	1.2	Did not answer	4	1.0	\$5000 - 5999	2	0.5
Did not answer	378	91.3	Highest grade completed-mother	26	6.3	\$6000 - 7499	1	0.2
Referred student to institution	11	2.7	Less than 7	46	11.1	\$7500 - 9999	7	1.7
Parent	96	23.2	7-8	132	31.7	Above \$10,000	4	1.0
Other student	18	4.3	9-11	130	31.6	Did not answer	27	6.5
Radio, newspaper, TV	75	18.1	12	8	1.9	Assistance received		
School recruiter	123	29.7	13	16	3.9	G. I. Bill	20	4.8
High school counselor	7	0.2	14	3	0.7	Scholarship	16	3.9
Welfare agency	21	5.1	15-16	23	5.6	Vocational rehabilitation	12	2.9
Did not answer	378	91.3	Above 16	11	2.7	Welfare agency	3	0.7
Race	378	91.3	Did not answer	4	1.0	Other	112	27.1
White	22	5.3	Distance to class each day (one way)	15	3.6	Plan to work toward 4 year degree	233	56.3
Negro	6	1.4	Less than 1 mile	78	18.8	Yes	116	28.0
American Indian	8	1.9	1-3	55	13.3	No	202	48.8
Did not answer	3	0.7	4-6	43	10.4	Did not answer	13	3.1
Age	3	0.7	7-9	72	17.4	Plan to be employed in North Carolina		
17	93	22.5	10-15	70	16.9	Yes	214	51.6
18	144	34.8	16-25	49	11.8	No	87	21.0
19	128	30.9	26-30	1	0.2	Did not answer	13	3.1
20-22	24	5.8	Over 30	269	65.0	If answer to above is no check one of the following		
23-25	7	1.7	Did not answer	35	8.5	Enter military service	20	4.8
26-29	5	1.2	Residence while attending class	62	15.0	Marriage	22	5.3
30-39	3	0.7	Live with parents	45	10.9	Work in another state	11	2.7
40-49	4	1.0	Live with spouse	3	0.7	Other	29	7.0
Over 50	2	0.5	Boarding student			Did not answer		
Did not answer	373	90.1	Other					
Sex	38	9.2	Did not answer					
Male	3	0.7						
Female								
Did not answer								

Areas where agricultural technicians are needed include supply and equipment firms, feed and fertilizer plants, horticultural enterprises, poultry hatcheries, agricultural chemical firms, agricultural research installations, food processing plants, forest services and industries, soil and water conservation districts, veterinary hospitals, and large, specialized farm operations.

In order to meet the needs for technicians in agriculture sixteen community colleges and technical institutes offered thirty-one agricultural programs during 1968. The offerings included curriculums in agricultural business, agricultural chemical, agricultural equipment, agricultural research, food processing technology, forest management, ornamental horticulture, poultry and livestock, soil and water conservation, veterinary medical technology, and machinery mechanics.

Most of the agriculture curriculums are two years in length and offer the Associate in Applied Science degree; however one year programs are preferred in some locations. A graduate of a one-year program is awarded a diploma.

CHARACTERISTICS OF STUDENTS

Table 10, page 45 shows the results of a study in which 414 agricultural students participated. According to the survey 66 percent of the agricultural students are between 19 and 22 years of age, 90 percent are male, 91 percent are of the white race and 86 percent are single.

Sixty percent of the agricultural students were enrolled in a general curriculum in high school; however 17 percent of the students were enrolled in a vocational curriculum. According to Table 10 the high school counselor was credited with influencing 12 percent more students to enroll in an agricultural program than the community college or technical institute recruiters.

Almost half of the students, 46 percent, live within ten miles of the institution while 12 percent drive more than 30 miles or a round trip of 60 miles. Fifteen percent of the students are considered boarding students.

A majority of the students, 83 percent, attend class eighteen or more hours per week even though 46 percent of the students are employed - at least part-time. Twenty-four percent of the students indicated that they would not have

attended another educational institution this year if the one they are now attending had not existed.

Seventy-six percent of the agricultural students plan to work in North Carolina after graduation and 28 percent plan to work toward a four-year degree. Less than one half of the students, 44 percent, are attending an educational institution located in their home county. Income and educational background of the agricultural students' parents correspond rather closely with that of the typical North Carolina community college or technical institute student. One-fifth of the parents had an income last year of less than \$4000; whereas 13 percent of the parents had an income of more than \$10,000.

TYPICAL STUDENT

The data indicate that the typical North Carolina community college or technical institute student enrolled in agriculture is a male, of the white race, single and between 19 and 22 years of age.

He was probably enrolled in the general curriculum in high school; however, he was more likely to have been enrolled in a vocational curriculum than any of the other community college or technical institute students except those enrolled in home economics.

The agricultural student travels farther to class than most of the other students and attends day classes 21 to 25 hours a week. He may work part-time, but he is likely to be unemployed. He plans to work in North Carolina after graduation and does not plan to work toward a four-year degree.

He enrolled in the institution he is now attending because the counselor, another student, or a recruiter from the community college or technical institute encouraged him to do so. He has already attended school longer than either of his parents. His parents' income for the last twelve months was between \$5000 and \$7500. He is more likely to be an out-of-county student than any of the other occupational students.

Distribution

Occupations in distribution comprise a relatively small but important number of workers in the labor force. Persons employed in these positions are usually responsible for supervisory tasks of service-oriented occupations as well as some production - focused fields of work.

Distribution programs offered in community colleges and technical institutes concentrate on specialized programs with specific orientation to preparation for middle management positions.

Four of the forty-two community colleges and technical institutes that participated in the study are currently (1968) granting either an Associate in Applied Science degree or a Vocational diploma in distribution education. These curriculums include hotel and motel management technology, traffic and transportation technology, and building materials management and sales.

CHARACTERISTICS OF STUDENTS

Table 11, page 49 shows the results of a study in which 256 distribution students participated. According to the study 59 percent of the students enrolled in the distribution curriculums in the North Carolina System are between 19 and 22 years of age, 75 percent are male, 87 percent are of the white race, and 75 percent are single.

A majority of the students, 87 percent, were enrolled in the general or academic curriculums in high school and 64 percent were referred to the institution they are now attending by the high school counselor or other students. Twenty-five percent of the students indicated they would not have attended another educational institution this year if the one they are now attending had not existed.

Of the students in the distribution curriculums, 51 percent are classified as returning freshmen, and 34 percent plan to work toward a four year degree. More than one-half of the students, 62 percent, live within 10 miles of the educational institution and 56 percent attend class eighteen hours or more per week. Sixty-six percent of those participating in the study are employed, and 79 percent plan to work in North Carolina after graduation.

Table 11
Socio-Economic Characteristics of Students Enrolled in Distribution Curriculum
(Number of Students - 256)

Program	Number of Students	Percent of Total	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	24	09.4	190	74.2	Yes	166	64.8
Technical	208	81.3	59	23.0	No	84	32.8
Vocational	19	07.4	1	00.4	Did not answer	6	02.3
Did not answer	5	02.0	1	00.4	Employment status		
Curriculum			2	00.8	Unemployed	85	33.2
Agriculture	0	00.0	3	01.2	Employed part-time	116	45.3
Distribution	256	100.0			Employed full-time	53	20.7
Engineering	0	00.0	3	01.2	Did not answer	2	00.8
Health	0	00.0	5	02.0	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	00.0	157	61.3	Yes	165	72.3
Office	0	00.0	11	04.3	No	63	24.6
Trade and industry	0	00.0	59	23.0	Estimated percent income for last 12 months	8	03.1
Did not answer	0	00.0	16	06.3	Less than \$999		
Classification			1	00.4	\$1000 - 1999	12	04.7
New freshman	51	19.9	1	00.4	\$2000 - 2999	15	05.9
Returning freshman	130	50.8	3	01.2	\$3000 - 3999	12	04.7
Sophomore	71	27.7	140	54.7	\$4000 - 4999	22	08.6
Did not answer	4	01.6	29	11.3	\$5000 - 5999	27	10.5
Attendance			82	32.0	\$6000 - 7499	30	11.7
Day	210	82.0	5	02.0	\$7500 - 9999	43	16.8
Evening	45	17.6	35	13.7	Above \$10,000	36	14.1
Did not answer	1	00.4	52	20.3	Did not answer	31	12.1
Contact hours			80	31.3	Estimated student income for last 12 months	28	10.9
1-6	30	11.7	3	01.2	Less than \$999		
7-11	17	06.6	7	02.7	\$1000 - 1999	92	35.9
12-15	35	13.7	9	03.5	\$2000 - 2999	53	20.7
16-17	27	10.5	3	01.2	\$3000 - 3999	31	12.1
18-20	79	30.9	7	02.7	\$4000 - 4999	19	07.4
21-25	37	14.5	3	01.2	\$5000 - 5999	16	06.3
26-30	8	03.1	7	02.7	\$6000 - 7499	12	04.7
Over 30	18	07.0	9	03.5	\$7500 - 9999	9	03.5
Did not answer	5	02.0	3	01.2	Above \$10,000	6	02.3
Referred student to institution			7	02.7	Did not answer	1	00.4
Parent	44	17.2	26	10.2	Assistance received	17	06.6
Employer	8	03.1	38	14.8	G. I. Bill	19	07.4
Other student	82	32.0	72	28.1	Scholarship	10	03.9
Radio, newspaper, TV	15	05.2	2	00.8	Vocational rehabilitation	12	04.7
School recruiter	11	04.3	8	03.1	Welfare agency	3	01.2
High school counselor	83	32.4	5	02.0	Other	65	25.4
Welfare agency	2	00.8	6	02.3	Did not answer	147	57.4
Did not answer	11	04.3	25	09.3	Plan to work toward 4 year degree		
Race			34	13.1	Yes	86	33.6
White	222	86.7	46	18.0	No	157	61.3
Negro	29	11.3	31	12.9	Did not answer	13	05.1
American Indian	1	00.4	32	12.5	Plan to be employed in North Carolina		
Did not answer	4	01.6	29	11.3	Yes	201	78.1
Age			17	06.6	No	49	19.1
17	5	02.0	18	07.0	Did not answer	6	02.3
18	52	20.3	2	00.8	If answer to above is no check one of the following		
19	79	30.9	174	68.0	Enter military service	23	09.0
20-22	72	28.1	50	19.5	Marriage	16	06.3
23-25	18	07.0	13	05.1	Work in another state	27	10.5
26-29	8	03.1	14	05.5	Other	6	02.3
30-39	14	05.5	14	05.5	Did not answer	164	71.1
40-49	6	02.3	5	02.0			
Over 50	0	00.0					
Did not answer	2	00.8					
Sex							
Male	192	75.0					
Female	60	23.4					
Did not answer	4	01.6					

A relatively high percentage of the parents, compared to the other occupational curriculum areas, did not complete the twelfth grade. The survey shows that 65 percent of the fathers and 60 percent of the mothers have less than a twelfth grade education. Almost one-fourth, 24 percent, of the parents had an income of less than \$4000 for the last twelve months.

TYPICAL STUDENT

The data indicate that the typical North Carolina community college or technical institute student enrolled in distribution is between 19 and 22 years of age, a male, of the white race, and single.

The typical student was enrolled in the general or academic curriculum in high school and was referred to the institution he is now attending by either the high school counselor or by another student. He would have attended another educational institution this year if the one he is now attending had not existed, although one fourth of his classmates would not have attended another educational institution.

The student lives within ten miles of the institution he is attending which is located in his home county. Even though the typical student is employed he attends class 18 or more hours a week. If he does not work toward a four-year degree, he plans to work in North Carolina after he graduates from the community college or technical institute.

Engineering

The training of engineering technicians is a comparatively new addition to the total field of occupational education; however, the rapidly changing complexion of science, industry, and education has focused a great deal of attention on the technician as a "key" person filling the gap which has been gradually widening between the professional engineer and scientist on the one hand and the skilled tradesman on the other.

The engineering curriculums are two years in length and lead to the Associate in Applied Science degree. Among the engineering curriculums offered in the North Carolina community colleges and technical institutes are chemical and civil engineering, air conditioning and refrigeration engineering

technologies, furniture, architectural and mechanical drafting and design technologies, electrical, electronics, and electro-mechanical engineering technologies, and industrial engineering and industrial management technologies. In addition to the above technologies some of the community colleges and technical institutes offer engineering curriculums in electronic data processing - scientific, fire and safety, fire science, furniture manufacturing, instrumentation, manufacturing technology, mechanical and production technology, police science, sanitary, textile, and transportation maintenance.

Eighty-seven engineering programs were taught in twenty-six of the forty-two institutions during 1968. Seventeen of the institutions offered three or more engineering curriculums.

CHARACTERISTICS OF STUDENTS

Table 12, page 52 shows the results of a study in which 1,266 engineering students participated. According to the survey 85 percent of the engineering students attend class during the day, and 63 percent attend class twenty-one or more hours per week. A majority of the students, 58 percent, are between 19 and 22 years of age. Ninety-six percent of the students are male, 93 percent are of the white race, and 69 percent are single.

Forty-six percent of the students are from out-of-county and 46 percent travel more than ten miles to class each day. Fourteen percent of the future technicians are boarding students.

Of the students participating in the study almost one-half, 44 percent, plan to work toward a four-year degree and 72 percent plan to work in North Carolina after graduation. Twenty-two percent indicated that they would not have attended an educational institution this year if the institution they are now attending had not existed. More than three-fourth of the parents, 77 percent, earn above \$4000. Sixty percent of the students are employed even though 63 percent attend class twenty-one or more hours per week and their parents have a higher income than most of the other occupational students.

Of the students participating in the study 90 percent were enrolled in either the general or academic curriculum in high school. Twenty-nine percent of the students noted that they were referred to the community college or technical institute by another student, and twenty-six percent gave the high school counselor credit for their attendance.

Table 12
Socio-Economic Characteristics of Students Enrolled in Engineering Curriculums
(Number of Students - 1,266)

	Number of Students	Percent of Total		Number of Students	Percent of Total		Number of Students	Percent of Total
Program			Marital status			Is this institution located in your home county		
College transfer	104	8.2	Single	877	69.3	Yes	672	53.1
Technical	1,122	88.6	Married	359	28.4	No	584	46.1
Vocational	36	3.0	Divorced	15	01.2	Did not answer	10	00.8
Did not answer	2	00.2	Widowed	4	00.3	Employment status		
Curriculum			Separated	5	00.4	Unemployed	493	38.9
Agriculture	0	00.0	Did not answer	6	00.5	Employed part-time	513	40.5
Distribution	0	00.0	Highest grade completed			Employed full-time	250	19.7
Engineering	1,266	100.0	7-8	12	00.9	Did not answer	10	00.8
Health	0	00.0	9-11	31	02.4	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	00.0	12	721	57.0	Yes	962	76.0
Office	0	00.0	GED	56	04.4	No	282	22.3
Trade and industry	0	00.0	13	324	25.6	Did not answer	22	01.7
Did not answer	0	00.0	14	80	06.3	Estimated parent income for last 12 months		
Classification			15-16	28	02.2	Less than \$999	43	03.4
New freshman	465	36.7	Above 16	4	00.3	\$1000 - 1999	38	03.0
Returning freshman	346	27.3	Did not answer	10	00.8	\$2000 - 2999	43	03.4
Copomore	420	33.2	Highest school curriculum			\$3000 - 3999	82	06.5
Did not answer	35	02.8	General	639	50.5	\$4000 - 4999	137	10.8
Attendance			Vocational	87	06.9	\$5000 - 5999	168	13.3
Day	1,072	84.7	Academic	503	39.7	\$6000 - 7499	238	18.8
Evening	189	14.9	Did not answer	37	02.9	\$7500 - 9999	196	15.5
Did not answer	5	00.4	Highest grade completed- father			Above \$10,000	238	18.8
Contact hour			Less than 7	159	12.6	Did not answer	83	06.6
1-6	95	07.5	7-8	243	19.2	Estimated student income for last 12 months		
7-11	60	04.7	9-11	324	25.6	Less than \$999	438	34.6
12-15	115	09.1	12	315	24.9	\$1000 - 1999	309	24.4
16-17	50	03.9	GED	27	02.1	\$2000 - 2999	150	11.8
18-20	125	09.9	13	36	02.8	\$3000 - 3999	103	08.1
21-25	345	27.3	14	55	04.3	\$4000 - 4999	66	05.2
26-30	375	29.6	15-16	45	03.6	\$5000 - 5999	57	04.5
Over 30	80	06.3	Above 16	30	02.4	\$6000 - 7499	57	04.5
Did not answer	21	01.7	Did not answer	32	02.5	\$7500 - 9999	30	02.4
Referred student to institution			Highest grade completed- mother			Above \$10,000	15	01.2
Parent	169	13.3	Less than 7	75	05.9	Did not answer	41	03.2
Employer	99	07.8	7-8	171	13.5	Assistance received		
Other student	365	28.8	9-11	348	27.5	G. I. Bill	158	12.5
Radio, newspaper, TV	91	07.2	12	452	35.7	Scholarship	43	03.4
School recruiter	138	10.9	GED	26	02.1	Vocational rehabilitation	28	02.2
High school counselor	325	25.7	13	45	03.6	Welfare agency	9	00.7
Welfare agency	18	01.4	14	14	01.1	Other	381	30.1
Did not answer	61	04.8	15-16	52	04.1	Did not answer	647	51.1
Race			Above 16	49	03.9	Plan to work toward 4 year degree		
White	1,179	93.1	Did not answer	25	02.0	Yes	558	44.1
Negro	58	04.6	Distance to class each day (one way)			No	652	51.5
American Indian	9	00.7	Less than 1 mile			Did not answer	56	04.4
Did not answer	20	01.6	1-3	82	06.5	Plan to be employed in North Carolina		
Age			4-6	232	18.3	Yes	916	72.4
17	6	00.5	7-9	244	19.3	No	303	23.9
18	218	17.2	10-15	126	10.0	Did not answer	47	03.7
19	368	29.1	16-25	200	15.8	If answer to above is no check one of the following		
20-22	367	29.0	26-30	183	14.5	Enter military service	121	09.6
23-25	135	10.7	Over 30	66	05.2	Marriage	44	03.5
26-29	71	05.6	Did not answer	128	10.1	Work in another state	156	12.3
30-39	77	06.1	Residence while attending class			Other	41	03.2
40-49	14	01.1	Live with parents	5	00.4	Did not answer	904	71.4
Over 50	6	00.5	Live with spouse	667	52.7			
Did not answer	4	00.3	Boarding student	309	24.4			
Sex			Other	176	13.9			
Male	1,217	96.1	Did not answer	101	08.0			
Female	45	03.6		13	01.0			
Did not answer	4	00.3						

TYPICAL STUDENT

The typical North Carolina community college or technical institute engineering student attends class during the day for twenty-one or more hours a week. He is between 19 and 22 years of age, a male, and of the white race. He is single, although he is more likely to be married than students in some of the other occupational curriculums. His father does not have a twelfth-grade education, but his mother has completed the twelfth grade. He may travel more than ten miles to class each day and is likely to be a boarding student.

After graduation the engineering student plans to work in North Carolina and may be considering working toward a four-year degree. He would have attended another educational institution this year if this institution had not existed.

The typical engineering student is attending an institution in his home county whereas almost half of his classmates live in another county. His parents are more likely to earn more than \$4000 per year than the parents of any of the other occupational students. Even though the typical student is in class twenty-one or more hours per week and has a higher parent income, he is employed at least part-time.

In high school, the typical student was enrolled in either the general or academic curriculum and was referred to the institution he is now attending by the high school counselor or another student. He is more likely to have been influenced by the school recruiter than most of the other occupational students.

Health

Health occupations education prepares individuals to function in a close working relationship with professional workers in providing services to persons with health problems. Graduates of the one-year and two-year programs offered in the community colleges and technical institutes in North Carolina must be able to fulfill a definite role in various aspects of health services.

Requirements for licensure and for certification of persons completing most of the health occupation programs influence the organization and development of the curriculums.

Table 13

Socio-Economic Characteristics of Students Enrolled in Health Curriculums
(Number of Students - 911)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	68	07.5	Single	437	48.0	Yes	564	61.9
Technical	151	16.6	Married	378	41.5	No	339	37.2
Vocational	688	75.5	Divorced	26	02.9	Did not answer	8	00.9
Did not answer	4	00.4	Widowed	29	03.2	Employment status		
Curriculum			Separated	37	04.1	Unemployed	692	76.0
Agriculture	0	00.0	Did not answer	4	00.4	Employed part-time	177	19.4
Distribution	0	00.0	Highest grade completed			Employed full-time	30	03.3
Engineering	0	00.0	7-8	7	00.8	Did not answer	12	01.3
Health	911	100.0	9-11	92	10.1	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	00.0	12	583	64.0	Yes	506	55.5
Office	0	00.0	GED	74	08.1	No	371	40.7
Trade and industry	0	00.0	13	91	10.0	Estimated parent income for last 12 months	34	03.7
Did not answer	0	00.0	14	44	04.8	Less than \$999		
Classification			15-16	8	00.9	\$1000 - 1999	90	09.9
New freshman	382	41.9	Above 16	6	00.7	\$2000 - 2999	60	06.6
Returning freshman	395	43.4	Did not answer	6	00.7	\$3000 - 3999	68	07.5
Sophomore	114	12.5	High school curriculum			\$4000 - 4999	83	09.1
Did not answer	20	02.2	General	494	53.1	\$5000 - 5999	88	09.7
Attendance			Vocational	95	10.4	\$6000 - 7499	102	11.2
Day	895	98.2	Academic	304	33.4	\$7500 - 9999	111	12.2
Evening	8	00.9	Did not answer	28	03.1	Above \$10,000	87	09.5
Did not answer	8	00.9	Highest grade completed-			Did not answer	98	10.8
Contact hours			father			Estimated student income for last 12 months	124	13.6
1-5	7	00.8	Less than 7	189	20.7	Less than \$999		
7-11	13	01.4	7-8	225	24.7	\$1000 - 1999	534	58.6
12-15	29	03.2	9-11	234	25.7	\$2000 - 2999	134	14.7
16-17	36	04.0	12	134	14.7	\$3000 - 3999	60	06.6
18-20	40	04.4	GED	9	01.0	\$4000 - 4999	20	02.2
21-25	104	11.4	13	14	01.5	\$5000 - 5999	15	01.6
26-30	126	13.9	14	20	02.2	\$6000 - 7499	12	01.3
Over 30	530	58.2	15-16	27	03.0	\$7500 - 9999	11	01.2
Did not answer	26	02.9	Above 16	24	02.6	Above \$10,000	6	00.7
Referred student to institution			Did not answer	35	03.8	Did not answer	7	00.8
Parent	89	09.8	Highest grade completed-			Assistance received	112	12.3
Employer	68	07.5	mother			G. I. Bill	26	02.9
Other student	256	28.1	Less than 7	113	12.4	Scholarship	86	09.4
Radio, newspaper, TV	16	18.0	7-8	183	20.1	Vocational rehabilitation	31	03.4
School recruiter	47	05.2	9-11	301	33.0	Welfare agency	25	02.7
High school counselor	172	18.9	12	184	20.2	Other	341	37.4
Welfare agency	16	01.8	GED	11	01.2	Plan to work toward 4 year degree	402	44.1
Did not answer	99	10.9	13	33	03.6	Yes	165	18.1
Race			14	22	02.4	No	701	76.9
White	687	75.4	15-16	24	02.6	Did not answer	45	04.9
Negro	210	23.1	Above 16	20	02.2	Plan to be employed in North Carolina		
American Indian	9	01.0	Did not answer	20	02.2	Yes	788	86.5
Did not answer	5	00.5	Distance to class each day (one way)			No	91	10.0
Age			Less than 1 mile			Did not answer	32	03.5
17	8	00.9	1-3	62	06.8	If answer to above is no check one of the following		
18	143	15.7	4-6	200	22.0	Enter military service	25	02.7
19	183	20.1	7-9	135	14.8	Marriage	34	03.7
20-22	171	18.8	10-15	102	11.2	Work in another state	56	06.1
23-25	56	06.1	16-25	145	15.9	Other	21	02.3
26-29	74	08.1	26-30	124	13.6	Did not answer	775	85.1
30-39	153	16.8	Over 30	59	06.5			
40-49	108	11.9	Did not answer	81	08.9			
Over 50	13	01.4	Residence while attending class	3	00.3			
Did not answer	2	00.2	Live with parents	340	37.3			
Sex			Live with spouse	332	36.4			
Male	132	14.5	Boarding student	100	11.0			
Female	775	85.1	Other	121	13.3			
Did not answer	4	00.4	Did not answer	18	02.0			

Thirty-three of the forty-two institutions that participated in the study are currently (1968) granting an Associate in Applied Science degree, a diploma, or certificate in health education. These curriculums include dental hygiene technology, dental laboratory technology, nursing-associate degree, dental assistant, medical laboratory assistant, medical office assistant, nurses' aide, nurses' assistant, personal care and family aide, practical nursing, and psychiatric aide.

CHARACTERISTICS OF STUDENTS

Table 13, page 54 shows the results of a study in which 911 health students participated. According to the study 85 percent of the health students in the North Carolina System are female. Twenty-three percent are Negro - the highest percentage of Negroes in any of the program areas.

Thirty-nine percent of the students are between 19 and 22 years of age, and 29 percent are between 30 and 49 years of age. A large proportion of the older students are probably mothers whose children are in school and who are now able to obtain the education that was not available to them earlier.

Almost one half of the health students, 42 percent, are married; and fewer than one fourth of the students, 23 percent, are employed. This relatively low percentage of students employed compared to the other curriculum areas can be accounted for, at least in part, by the fact that 98 percent attend class during the day, and 58 percent attend class more than thirty hours per week. The health student travels about the same distance to class as the other students; however, nine percent travel over 30 miles to class.

The educational background of the parents of the health student is lower than the educational background of the parents of the other students in the study. Seventy-one percent of the fathers and 66 percent of the mothers have not completed the twelfth grade. Fifty-four percent of the parents had an income last year of less than \$6000.

Seventy-seven percent of the students do not plan to work toward a four-year degree, and 41 percent of the students indicated they would not have attended an educational institution this year if the one they are now attending had not existed. A majority of the health students, 87 percent, plan to work in North Carolina after graduation.

Fifty-three percent of the students were enrolled in a general and 33 percent in an academic curriculum in high school. Almost two thirds of the students, 65 percent, were referred to the community college or technical institute by either another student, a high school counselor, or the news media.

TYPICAL STUDENT

The data indicate that the typical health student in the North Carolina community college or technical institute is female, white, and single, although many of her classmates are married. She has about equal chance of being 19 to 22 years of age or 30 to 49 years of age. She attends class during the day for more than thirty hours per week and travels about the same distance to class as most of the other students. She is unemployed, and her parents' income last year was below \$6000.

The typical health student does not plan to work toward a four-year degree, and almost one half of her classmates would not have attended another educational institution if the one she is attending had not existed. She is the most likely to work in North Carolina after graduation of any of the occupational students. The student already has more years of formal education than either of her parents. While in high school she was enrolled in either the general or academic curriculum and was referred to the institution she is attending by another student, high school counselor, or the news media.

Home Economics

Home economics education, although a recent addition to the two-year educational institution, involves foods, nutrition, textiles, clothing, child development, family relations, home furnishings and equipment, household economics, and home management.

The range of home economics careers is wide and varied. Programs currently being offered in community colleges and technical institutes throughout the country prepare graduates for careers in interior design, fashion merchandising, fashion designing, child care, and food service. Graduates may also be employed as assistants to professional home economists.

Table 14

Socio-Economic Characteristics of Students Enrolled in Home Economics Curriculums
(Number of Students - 25)

	Number of Students	Percent of Total	Number of Students	Percent of Total
Program				
College transfer	13	52.0	18	72.0
Technical	9	36.0	3	12.0
Vocational	3	12.0	2	8.0
Did not answer	0	00.0	1	04.0
Curriculum	0	00.0	0	00.0
Agriculture	0	00.0	1	04.0
Distribution	0	00.0	0	00.0
Engineering	0	00.0	0	00.0
Health	25	100.0	2	8.0
Home Economics	0	00.0	0	00.0
Office	0	00.0	16	64.0
Trades and industry	0	00.0	5	20.0
Did not answer	0	00.0	3	12.0
Classification	0	00.0	1	04.0
New freshman	5	20.0	21	84.0
Returning freshman	11	44.0	4	16.0
Sophomore	7	28.0	0	00.0
Did not answer	2	08.0	0	00.0
Attendance				
Day	23	92.0	6	24.0
Evening	2	08.0	2	08.0
Did not answer	0	00.0	1	04.0
Contact hours				
1-6	1	04.0	1	04.0
7-11	1	04.0	4	16.0
12-15	6	24.0	4	16.0
16-17	5	20.0	4	16.0
18-20	6	24.0	0	00.0
21-25	2	08.0	0	00.0
26-30	1	04.0	0	00.0
Over 30	2	08.0	0	00.0
Did not answer	1	04.0	16	64.0
Referred student to institution				
Parent	7	28.0	3	12.0
Employer	2	08.0	3	12.0
Other student	2	08.0	1	04.0
Radio, newspaper, TV	2	08.0	0	00.0
School recruiter	3	12.0	0	00.0
High school counselor	6	24.0	0	00.0
Welfare agency	3	12.0	1	04.0
Did not answer	0	00.0	0	00.0
Race				
White	17	68.0	0	00.0
Negro	5	20.0	6	24.0
American Indian	2	08.0	1	04.0
Did not answer	1	04.0	2	08.0
Age				
17	1	04.0	4	16.0
18	8	32.0	12	48.0
19	8	32.0	16	64.0
20-22	5	20.0	8	32.0
23-25	1	04.0	1	04.0
26-29	0	00.0	0	00.0
30-39	0	00.0	18	72.0
40-49	0	00.0	6	24.0
Over 50	2	08.0	1	04.0
Did not answer	0	00.0	0	00.0
Sex				
Male	8	32.0	4	16.0
Female	17	68.0	1	04.0
Did not answer	0	00.0	3	12.0
			2	08.0
			15	60.0
Marital status				
Single				
Married				
Divorced				
Widowed				
Separated				
Did not answer				
Highest grade completed				
7-8				
9-11				
12				
GED				
13				
14				
15-16				
Above 16				
Did not answer				
High school curriculum				
General				
Vocational				
Academic				
Did not answer				
Highest grade completed-father				
Less than 7				
7-8				
9-11				
12				
GED				
13				
14				
15-16				
Above 16				
Did not answer				
Highest grade completed-mother				
Less than 7				
7-8				
9-11				
12				
GED				
13				
14				
15-16				
Above 16				
Did not answer				
Highest grade completed-				
Distance to class each day (one way)				
Less than 1 mile				
1-3				
4-6				
7-9				
10-15				
16-25				
26-30				
Over 30				
Did not answer				
Residence while attending class				
Live with parents				
Live with spouse				
Boarding student				
Other				
Did not answer				
Is this institution located in your home county				
Yes				
No				
Did not answer				
Employment status				
Unemployed				
Employed part-time				
Employed full-time				
Did not answer				
Would you have attended another educational institution this year if this institution had not existed				
Yes				
No				
Did not answer				
Estimated parent income for last 12 months				
Less than \$999				
\$1000 - 1999				
\$2000 - 2999				
\$3000 - 3999				
\$4000 - 4999				
\$5000 - 5999				
\$6000 - 7499				
\$7500 - 9999				
Above \$10,000				
Did not answer				
Estimated student income for last 12 months				
Less than \$999				
\$1000 - 1999				
\$2000 - 2999				
\$3000 - 3999				
\$4000 - 4999				
\$5000 - 5999				
\$6000 - 7499				
\$7500 - 9999				
Above \$10,000				
Did not answer				
Assistance received				
G. I. Bill				
Scholarship				
Vocational rehabilitation				
Welfare agency				
Other				
Did not answer				
Plan to work toward 4 year degree				
Yes				
No				
Did not answer				
Plan to be employed in North Carolina				
Yes				
No				
Did not answer				
If answer to above is no check one of the following				
Enter military service				
Marriage				
Work in another state				
Other				
Did not answer				

Home economics was the last of the seven curriculum areas to be offered in the North Carolina community colleges and technical institutes. Only one of the forty-two institutions offered a curriculum in this area during the winter quarter of 1968. The graduate of this program is awarded an Associate in Applied Science degree in interior design technology.

CHARACTERISTICS OF STUDENTS

Table 14, page 57 shows the results of a study in which 25 home economics students participated. According to the study 68 percent of the students are female, 72 percent are single, 68 percent are white, and 64 percent are either 18 or 19 years of age.

A majority of those enrolled in home economics, 92 percent, attend class during the day. Thirty-two percent of the students are employed either on a part-time or full-time basis even though 68 percent of the students who participated in the study attend class between 12 and 20 hours a week.

Most of the students, 80 percent, were enrolled in an academic or general program in high school, although 20 percent were classified as vocational students. Twenty-eight percent of the students indicated they were referred to the institution they are now attending by their parents, whereas 24 percent gave the high school counselor and 12 percent gave the school recruiter credit for their attending the community college or technical institute.

Even though the educational background of the parents of the home economics students tends to be higher than that of the parents of the students in the other program areas, the family income for the last twelve months was lower. Table 14 shows that 40 percent of the parents of the home economics students had an income of less than \$4000, and approximately one half of the parents had a twelfth grade education or above.

A majority of the students, 84 percent, would have attended another educational institution this year if the one they are now attending had not existed. Although 64 percent are considering working toward a four-year degree, almost one fourth of the home economics students plan to work out-of-state.

TYPICAL STUDENT

The data indicate that the typical North Carolina community college or technical institute student enrolled in home economics is between 18 or 19 years of age, female, white, and single.

The typical student attends classes somewhere between 12 and 20 hours a week during the day. She is unemployed, although almost one third of her classmates are employed either on a part-time or full-time basis.

The home economics student was more likely to be enrolled in a vocational curriculum in high school than any of the other occupational students; however, she was probably enrolled in an academic or general program.

Her parents seem to have had more influence pertaining to the educational institution she attends than did the high school counselor or school recruiter. Her parents' income is somewhat lower than the parents' income of the other occupational programs.

The typical student is classified as a returning freshman and plans to work toward a four-year degree. She plans to work in North Carolina after graduation although a relatively large percentage of her classmates do not plan to work in North Carolina. She would have attended another educational institution this year if the one she is now attending had not existed.

Office

Occupational office programs at the community college and technical institute level have an unique educational function in the geographic areas they service. Changes in the job structures of the community and higher job entry requirements determine the purpose of these programs. Prospective employees are educated to fill middle management positions in business. In order to supply industry and business with trained personnel, the following curriculums are offered in the North Carolina community college system: accounting, business administration, court reporting, library assistant, electronic data processing - business, secretarial - engineering and technical, secretarial - executive, secretarial - legal, and secretarial - medical. The distribution of these curriculums among the forty-two institutions is included in Table 9, page 44.

Table 15

Socio-Economic Characteristics of Students Enrolled in Office Curriculums
(Number of Students - 2,174)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is institution located in your home county	Number of Students	Percent of Total
College transfer	148	6.8	Single	1,564	71.9	Yes	1,552	71.4
Technical	1,840	84.6	Married	526	24.2	No	604	27.8
Vocational	174	8.0	Divorced	35	1.6	Did not answer	18	0.8
Did not answer	12	0.6	Widowed	19	0.9	Employment status		
Curriculum			Separated	25	1.1	Unemployed	1,038	47.7
Agriculture	0	0.0	Did not answer	5	0.2	Employed part-time	719	33.1
Distribution	0	0.0	Highest grade completed			Employed full-time	397	18.3
Engineering	0	0.0	7-8	13	0.6	Did not answer	20	0.9
Health	0	0.0	9-11	68	3.1	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	0.0	12	1,382	63.6	Yes	1,473	67.8
Office	2,174	100.0	GED	92	4.2	No	657	30.2
Trade and industry	0	0.0	13	434	20.0	Did not answer	44	0.2
Did not answer	0	0.0	14	136	6.3	Estimated parent income for last 12 months		
Classification			15-16	21	1.0	Less than \$999		
New freshman	749	34.5	Above 16	4	0.2	\$1000 - 1999	119	5.5
Returning freshman	851	39.1	Did not answer	24	1.1	\$2000 - 2999	120	5.5
Sophomore	513	23.6	High school curriculum			\$3000 - 3999	110	5.1
Did not answer	61	2.8	General	1,100	50.6	\$4000 - 4999	210	9.7
Attendance			Vocational	286	13.2	\$5000 - 5999	244	11.2
Day	1,806	83.1	Academic	704	32.4	\$6000 - 7499	274	12.6
Evening	356	16.4	Did not answer	84	3.9	\$7500 - 9999	322	14.8
Contact hours	12	0.6	Highest grade completed-			Above \$10,000	289	13.3
1-6	200	9.2	father	306	14.1	Did not answer	263	12.1
7-11	129	5.9	Less than 7	490	22.5	Estimated student income for last 12 months	223	10.3
12-15	219	10.1	7-8	585	26.9	Less than \$999		
16-17	190	8.7	9-11	483	22.2	\$1000 - 1999	1,034	47.6
18-20	582	26.8	GED	23	1.1	\$2000 - 2999	374	17.2
21-25	555	25.5	13	59	2.7	\$3000 - 3999	211	9.7
26-30	89	4.1	14	69	3.2	\$4000 - 4999	132	6.1
Over 30	158	7.3	15-16	50	2.3	\$5000 - 5999	102	4.7
Did not answer	52	2.4	Above 16	45	2.1	\$6000 - 7499	56	2.6
Referred student to institution			Did not answer	64	2.9	\$7500 - 9999	43	2.0
Parent	394	18.1	Highest grade completed-			Above \$10,000	29	1.3
Employer	67	3.1	mother	160	7.4	Did not answer	19	0.9
Other student	571	26.3	Less than 7	374	17.2	Assistance received	174	8.0
Radio, newspaper, TV	290	13.3	7-8	754	34.7	G. I. Bill		
School recruiter	196	9.0	9-11	591	27.2	Scholarship	122	5.6
High school counselor	554	25.5	12	36	1.7	Vocational rehabilitation	92	4.2
Welfare agency	13	0.6	GED	59	2.7	Welfare agency	77	3.5
Did not answer	89	4.1	13	61	2.8	Other	22	1.0
Race			14	21	1.0	Plan to work toward 4 year degree	1,143	52.6
White	1,819	83.7	15-16	69	3.2	Did not answer		
Negro	324	14.9	Above 16	21	1.0	Plan to work toward 4 year degree		
American Indian	17	0.8	Did not answer	49	2.3	Yes	478	22.0
Did not answer	14	0.7	Distance to class each day (one way)			No	1,594	73.3
Age			Less than 1 mile			Did not answer	102	4.7
17	21	1.0	1-3	138	6.3			
18	494	22.7	4-6	425	19.5			
19	681	31.3	7-9	444	20.4			
20-22	542	24.9	10-15	370	17.0			
23-25	113	5.2	16-25	302	13.9			
26-29	100	4.6	26-30	109	5.0			
30-39	129	5.9	Over 30	92	4.2			
40-49	71	3.3	Did not answer	16	0.7			
Over 50	20	0.9	Residence while attending class					
Did not answer	3	0.1	Live with parents	1,444	66.4			
Sex			Live with spouse	451	20.7			
Male	837	38.5	Boarding student	143	6.6			
Female	1,334	61.4	Other	119	5.5			
Did not answer	3	0.1	Did not answer	17	0.8			

Forty of the forty-two community colleges and technical institutes offered a total of 131 curriculums in office education during 1968. A graduate of the two-year programs in office education receives an Associate in Applied Science degree, and a graduate of the one-year programs receives a diploma.

CHARACTERISTICS OF STUDENTS

Table 15, page 60 shows the results of the survey in which 2,174 office students participated. According to the survey 61 percent of the students are female, 84 percent are of the white race, 72 percent are married, and 54 percent are either 18 or 19 years of age.

Thirty-nine percent of the office students are classified as returning freshmen compared to 35 percent enrolling for the first time. A majority of the students, 83 percent, attend class during the day, and more than one half of the students attend class between 18 and 25 hours a week. Seventy-one percent of the office students are enrolled in an institution located in their home county, with 59 percent traveling less than ten miles to class each day. Of the students participating in the study 66 percent live with their parents.

Most of the students, 83 percent, indicated they had been enrolled in either a general or academic program in high school, and twenty-six percent claimed they were referred to the institution they are now attending by other students. The same number of students gave the high school counselor credit for their attending this institution. Thirteen percent of the students indicated that they were referred to the institution by either radio, newspaper, or television. Thirty percent of the students would not have attended another educational institution this year if the one they are now attending had not existed.

The data included in the study show that 26 percent of the parents of the office students had an income of less than \$4000 during the last twelve months, and 64 percent of the fathers and 59 percent of the mothers had less than a twelfth grade education. Both the parents' income and educational background are somewhat lower than for the other students participating in the survey.

Eighty-two percent of the office students plan to work in North Carolina after graduation, and twenty-two percent plan to work toward a four-year degree.

TYPICAL STUDENT

The data indicate that the typical office student in the North Carolina community college or technical institute is a female, white, married, and either 18 or 19 years of age.

She attends class between 18 and 25 hours per week during the day and is probably classified as a returning freshman. The student attends an institution in her home county, lives with her parents, and travels less than ten miles to class.

The typical student was enrolled in a general or academic program in high school and was probably referred to this institution by another student or high school counselor. She would have attended another institution this year if the one she is now attending had not existed. North Carolina businesses will probably utilize her abilities after graduation, but she does not plan to work toward a four-year degree.

Her parents' income and educational background are somewhat lower than those of the typical North Carolina community college or technical institute student.

Trade and Industry

The primary purpose of trade and industrial education is to provide instruction which is planned to develop basic manipulative skills, safety judgment, technical knowledge, and related occupational information for the purpose of training persons for initial employment in industrial occupations and upgrading or retraining workers employed in industry.

This type of individual according to the United States Department of Health, Education, and Welfare¹, will engage in occupations concerned with designing, producing, processing, assembling, maintaining, servicing, or repairing of any product or commodity.

1. United States Department of Health, Education, and Welfare, Office of Education. Administration of Vocational Education. Vocational Education Bulletin, General Series, No. 1 Washington, D. C.: Government Printing Office, 1958.

Table 16
Socio-Economic Characteristics of Students Enrolled in Trade and Industry Curriculums
(Number of Students - 2,677)

Program	Number of Students	Percent of Total	Marital status	Number of Students	Percent of Total	Is this institution located in your home county	Number of Students	Percent of Total
College transfer	82	03.1	Single	1,585	59.2	Yes	1,705	63.7
Technical	600	22.4	Married	1,027	38.4	No	948	35.4
Vocational	1,982	74.0	Divorced	28	01.0	Did not answer	24	00.9
Did not answer	13	00.5	Widowed	9	00.3	Employment status		
Curriculum			Separated	16	00.6	Unemployed	864	32.3
Agriculture	0	00.0	Did not answer	12	00.4	Employed part-time	683	25.5
Distribution	0	00.0	Highest grade completed			Employed full-time	1,105	41.3
Engineering	0	00.0	7-8	108	04.0	Did not answer	25	00.9
Health	0	00.0	9-11	283	10.6	Would you have attended another educational institution this year if this institution had not existed		
Home Economics	0	00.0	12	1,790	66.9	Yes		
Office	0	00.0	GED	196	07.3	No		
Trade and industry	2,677	100.0	13	177	06.6	Estimated parent income for last 12 months		
Did not answer	0	00.0	14	61	02.3	Less than \$999	1,565	58.5
Classification			15-16	26	01.0	\$1000 - 1999	1,036	38.7
New freshman	1,091	40.8	Above 16	8	00.3	\$2000 - 2999	76	02.8
Returning freshman	1,131	42.2	Did not answer	28	01.0	\$3000 - 3999		
Sophomore	341	12.7	High school curriculum			\$4000 - 4999	195	07.3
Did not answer	114	04.3	General	1,702	63.6	\$5000 - 5999	170	06.4
Attendance			Vocational	415	15.5	\$6000 - 7499	158	05.9
Day	1,822	68.1	Academic	430	16.1	\$7500 - 9999	239	08.9
Evening	835	31.2	Did not answer	130	04.9	Above \$10,000	307	11.5
Did not answer	20	00.7	Highest grade completed-father			Did not answer	355	13.3
Contact hours			Less than 7	524	19.6	Estimated student income for last 12 months	342	12.8
1-6	248	09.3	7-8	628	23.5	Less than \$999	270	10.1
7-11	144	05.4	9-11	699	26.1	\$1000 - 1999	343	12.8
12-15	199	07.4	12	506	18.9	\$2000 - 2999		
16-17	84	03.1	13	41	01.5	\$3000 - 3999	864	32.3
18-20	166	06.2	GED	30	01.1	\$4000 - 4999	425	15.9
21-25	237	08.9	14	35	01.7	\$5000 - 5999	242	09.0
26-30	849	31.7	15-16	55	02.1	\$6000 - 7499	206	07.7
Over 30	707	26.4	Above 16	38	01.4	\$7500 - 9999	241	09.1
Did not answer	43	01.6	Did not answer	111	04.1	Above \$10,000	244	09.1
Referred student to institution			Highest grade completed-mother			Did not answer	184	06.9
Parent	306	11.4	Less than 7	286	10.7	Estimated student income for last 12 months	91	03.4
Employer	228	08.5	7-8	466	17.4	Less than \$999	36	01.3
Other student	727	27.2	9-11	667	32.4	\$1000 - 1999	144	05.4
Radio, newspaper, TV	403	15.1	12	696	26.0	\$2000 - 2999	431	16.1
School recruiter	235	08.8	GED	57	02.1	\$3000 - 3999	58	02.2
High school counselor	615	23.0	13	39	01.5	\$4000 - 4999	110	04.1
Welfare agency	28	01.0	14	62	02.3	\$5000 - 5999	45	01.7
Did not answer	135	05.0	15-16	69	02.6	\$6000 - 7499	780	29.1
Race			Above 16	34	01.3	Above \$10,000	1,153	46.8
White	2,192	81.9	Did not answer	101	03.8	Did not answer		
Negro	446	16.7	Distance to class each day (one way)			Plan to work toward 4 year degree		
American Indian	19	00.7	Less than 1 mile	140	05.2	Yes	527	19.7
Did not answer	20	00.8	1-3	451	16.8	No	2,024	75.6
Age			4-6	464	17.3	Did not answer	126	04.7
17	22	00.8	7-9	331	12.4	Plan to be employed in North Carolina		
18	457	17.1	10-15	506	18.9	Yes	2,167	80.9
19	630	23.5	16-25	384	14.3	No	420	15.7
20-22	558	20.8	26-30	142	05.3	Did not answer	90	03.4
23-25	271	10.1	Over 30	239	08.9	If answer to above is no check one of the following		
26-29	218	08.1	Did not answer	20	00.7	Enter military service	213	08.0
30-39	344	12.9	Residence while attending class			Marriage	131	04.9
40-49	142	05.3	Live with parents	1,344	50.2	Work in another state	222	08.3
Over 50	32	01.2	Live with spouse	892	33.3	Other	111	04.1
Did not answer	3	00.1	Boarding student	218	09.1	Did not answer	2,000	74.7
Sex			Other	191	07.1			
Male	2,496	93.2	Did not answer	32	01.2			
Female	165	06.2						
Did not answer	16	00.6						

North Carolina's System of community colleges and technical institutes offers a wide variety of industrially oriented training programs. The training ranges from highly skilled engineering technicians and skilled craftsmen to semi-skilled workers for the specific industry need.

A total of 189 trade and industrial programs are currently (1968) being offered in the forty-two institutions. Graduates of the two-year curriculums receive an Associate in Applied Science degree; graduates of the one-year programs receive a diploma and graduates of programs of less than one-year receive a certificate. These curriculums include commercial art and advertising design technology, printing management technology, air conditioning and refrigeration service, auctioneering, auto body repair, auto mechanics, carpentry, cosmetology, diesel mechanics, drafting - building trades, drafting - mechanical, electrical installation and maintenance, electrical linesman and heavy equipment operator. In addition to the above trade and industrial curriculums some of the community colleges and technical institutes offer graphic arts - printing, knitting, machine fixing, machinist, maintenance - electromechanical, marine mechanics, masonry, outboard motor repair, production assistant - furniture, radio and television servicing, sewing machine mechanics, textile production, tool and die making, upholstering, upholstery sewing and welding.

CHARACTERISTICS OF STUDENTS

Table 16, page 63 shows the results of the survey in which 2,677 trade and industrial students participated. According to the survey 93 percent of the trade and industrial students are male, 82 percent are white, and 59 percent are single.

A majority of the students, 61 percent, are between 18 and 22 years of age; however, 19 percent of the students listed their age as 30 years of age or above. The trade and industrial student is more likely than any of the occupational students to attend evening classes. Thirty-one percent of the students attend evening classes, and 58 percent attend class twenty-six or more hours per week.

Twenty-nine percent of the parents had an income of less than \$4000 during the last twelve months, and 69 percent of the fathers and 61 percent of the mothers have less than a twelfth grade education.

Almost twice as many of the trade and industrial students are employed full-time as those in the next highest curriculum area. Forty-one percent of the trades and industry students are employed full-time compared to 21 percent of the students enrolled in the distribution curriculums. Two-thirds of the trade and industrial students are employed at least part-time.

Eighty-one percent of those participating in the study plan to be employed in North Carolina after graduation, and 39 percent claim that they would not have attended another educational institution this year if the one they are now attending had not existed.

TYPICAL STUDENT

The data indicate that the typical North Carolina community college or technical institute student enrolled in a trade and industrial curriculum is male, single, and between 18 and 22 years of age. He attends class twenty-six or more hours per week and is more likely to attend evening classes than any of the occupational students.

Even though the trade and industrial student attends class more hours per week than most of the students, he is more likely to be employed. Almost one-half of his classmates are employed on a full-time basis. The typical student plans to be employed in North Carolina after graduation and probably would have attended another educational institution this year if the one he is now attending had not existed. More than one third of the students participating in the study indicated they would not have attended another educational institution this year.

Chapter V

CONCLUSIONS AND RECOMMENDATIONS

Comprehensive community colleges are created to provide a post-secondary educational opportunity for the people of all socio-economic backgrounds within commuting distance of their homes.

The community colleges and technical institutes are not limited to the usual college curriculums and degrees. Thus, because of the greater number of offerings and the fact that these institutions operate under an "open door policy," it has been found that individuals who seek or need more education differ widely in ability, in adjustment, in beliefs, and in physical and mental health. While some needs are important in determining interest in future education, others are equally potent in determining the kind and amount of education desired. Some students have heavy responsibilities and few resources, whereas others are in a most favorable financial position.

In general, the population of a particular college tends to be more homogeneous than the total college population. There is a slight tendency for the socio-economic and cultural differences within an institution to appear to be of lesser magnitude than the differences between total population of different groups or institutions.

The results of this survey tend to strengthen the report by Dressel that one would expect to find more variation among the socio-economic differences within a state system of educational institutions than within the individual institutions.¹

The data in this study indicate that all the institutions have students from varied social and economic backgrounds. No attempt was made to elaborate on each characteristic for

1. Dressel, "Educational Demands Arising From Individual Needs and Purposes," p. 50.

each institution; however, some of the socio-economic similarities and differences within the system are considered.

A characteristic of major concern is the proportion of day to evening students. (It should be noted that this survey involved only students enrolled in curriculum programs and that all the institutions offer non-curriculum programs, most of which are in the evening.) The day enrollment varies from thirty-nine percent at one institution to one-hundred percent at another institution within the system. The data indicate that thirty-one of the institutions enroll more than three-fourths of their credit students in a day program, whereas twenty of the thirty-two institutions have over ninety percent of their student body classified as day students. Three institutions in the system; however, have an almost equal day and evening enrollment in curriculum programs.

The percentage of male students in the institutions ranges from 28 percent to 100 percent. A majority of the institutions (27) list a ratio of male to female - somewhere between 1:1 and 3:1. Nine institutions have a male to female ratio higher than a 3:1. The percentage of female students in a particular institution is largely dependent upon the number of students enrolled in the office, health, and home economics curriculums.

Marital status of the students appears to be more closely related to day or evening attendance than to a particular institution. If an institution has a high percentage of evening attendance, it usually has a high percentage of married students. Twelve of the forty-two institutions have seventy-five percent or more single students, whereas five institutions have fewer than 50 percent of the students who are single.

According to the survey, the percentage of students who are Negro ranges from zero to 55. Nineteen institutions have a Negro enrollment of 10 percent or less while three institutions have an enrollment of 50 percent or more. Eleven of the institutions having a Negro enrollment of 10 percent or less are located in the western part of the state where the Negro population is relatively small.

Sixteen of the forty-two institutions have over forty percent out-of-county students, whereas eleven of the institutions have 75 percent or more of their students living within the county where the institution is located. Another characteristic that seems to be affected by the number of out-of-county students is the number of boarding students. A majority of the institutions (31) have 10 percent or fewer of their students listed as boarding students; however, five of the institutions surveyed listed over one fifth of their students as boarding students. It should be noted that all

of the institutions are commuting institutions without dormitory facilities.

The data show that many of the people who attend community college institutions are employed. The percentage of unemployed students varies from a high of 87 percent at one institution in the state to a low of 21 percent at another institution. Almost one-half of the institutions (19) have 40 to 60 percent of their students employed.

The information in this study may serve as a base for future studies concerning student and family income, parents' education, monetary assistance, employment status, sex, race, marital status, highest grade completed, high school curriculum, student's plans relative to future education and employment, class attendance and distance to class.

From the preceding data it is evident that variations exist in the social and economic characteristics of students enrolled for credit in the North Carolina community colleges and technical institutes. Table 17, page 69 shows a wide variation among the characteristics of the North Carolina student, the college transfer, the technical, and vocational student. A similar comparison may be obtained from Table 18, page 70 for the seven occupational divisions.

The community colleges and technical institutes, through the "Open Door" policy, have successfully extended universal education beyond the high school. But the data in this study indicate that certain factors should be strengthened if these institutions are to provide a sound educative program for "all" the community.

. There should be a determined effort to reach "all" socio-economic groups of the community, not only in the non-credit, but the credit programs.

. There should be more credit programs that are attractive to females. Prospective students should be made aware of the opportunities that exist for females in many of the "all male" occupations.

. A ratio of five day students to one evening student throughout the state and the fact that some institutions do not have any evening students enrolled in credit programs indicate that adequate credit programs are not available for those who desire to enroll in the evening. A one-half time program offered after 5:00 p.m. has proven satisfactory at some locations and should be considered as a possible solution to the low evening enrollment.

. Consideration should be given to the recruiting, scheduling, and adapting programs for the "over 25" student.

Table 17

Socio-Economic Characteristics of Community College and Technical Institute Students
for the North Carolina System, the College Transfer Program,
the Technical Program, and the Vocational Program

	North Carolina System	College Transfer Program	Technical Program	Vocational Program
	Percent of Total	Percent of Total	Percent of Total	Percent of Total
Evening attendance	16.2	09.0	14.8	24.1
Less than 16 contact Hours Per Week	26.4	46.3	20.5	19.2
More than 25 contact hours per week	29.1	03.7	21.2	63.4
Referred to institution by school recruiter	08.3	06.6	09.4	07.9
Nonwhite students	13.0	07.7	12.0	18.6
Students less than 20 years of age	48.7	53.0	51.4	41.6
Students 30 years of age or older	13.0	07.8	09.4	22.6
Female students	32.1	32.1	33.3	30.2
Married students	28.0	19.5	25.0	39.5
Enrolled in vocational curriculum in high school	10.4	03.3	10.7	15.8
Fathers with less than 12 years education	61.8	52.6	61.2	70.2
Mothers with less than 12 years education	54.4	45.2	53.6	63.2
Students traveling 10 miles or more to class	44.9	47.7	42.7	47.0
Boarding students	10.5	13.1	11.0	07.7
Students from out-of-county	37.5	41.4	38.0	33.9
Students employed part-time	32.3	36.7	35.0	24.1
Students employed full-time	21.2	13.5	18.9	31.1
Students who would not have attended another institution	29.6	21.0	27.1	40.6
Parents with income of less than \$5000	34.2	28.0	33.1	41.3
Parents with income of more than \$10,000	14.4	21.2	14.0	09.4
Students receiving G I Bill	09.6	08.6	08.8	11.7
Students receiving a scholarship	05.2	08.7	04.3	03.7
Students who plan to work toward 4 year degree	37.9	86.2	27.3	16.0
Students who plan to be employed in North Carolina	78.8	76.5	77.2	83.5

Table 18

Socio-Economic Characteristics of Community College and Technical Institute Students
in Each of the Seven Occupational Divisions

	Agriculture	Distribution	Engineering	Health	Home Economics	Office	Trade and Industry
	Percent of Total	Percent of Total	Percent of Total	Percent of Total	Percent of Total	Percent of Total	Percent of Total
Evening attendance	07.7	17.6	14.9	00.9	08.0	16.4	31.2
Less than 16 contact hours per week	10.8	32.0	21.3	05.4	32.0	25.2	22.1
More than 25 contact hours per week	09.0	10.1	35.9	72.0	12.0	11.4	58.1
Referred to institution by school recruiter	18.1	04.3	10.9	05.2	12.0	09.0	08.8
Nonwhite students	06.7	11.7	05.3	24.1	28.0	15.7	17.4
Students less than 20 years of age	58.0	53.2	46.8	36.7	68.0	55.0	41.4
Students 30 years of age or older	03.1	07.8	07.7	30.1	08.0	10.1	19.4
Female students	09.2	23.4	03.6	85.1	68.0	61.4	06.2
Married students	11.6	23.0	28.4	41.5	12.0	24.2	38.4
Enrolled in vocational curriculum in high school	17.4	11.3	06.9	10.4	20.0	13.2	15.5
Fathers with less than 12 years education	60.9	65.3	57.4	71.1	52.0	63.5	69.2
Mothers with less than 12 years education	49.3	59.8	46.9	65.5	48.0	59.3	60.5
Students traveling 10 miles or more to class	53.6	37.4	45.5	44.9	44.0	40.1	47.4
Boarding students	15.0	05.1	13.9	11.0	04.0	06.6	08.1
Students from out-of-county	55.6	32.8	46.1	37.2	28.0	27.8	35.4
Students employed part-time	34.8	45.3	40.5	19.4	20.0	33.1	25.5
Students employed full-time	10.9	20.7	19.7	03.3	12.0	18.3	41.3
Students who would not have attended another institution	24.4	24.6	22.3	40.7	16.0	30.2	38.7
Parents with income of less than \$5000	34.1	34.4	27.1	42.8	48.0	37.0	40.0
Parents with income of more than \$10,000	13.0	12.1	18.8	10.8	16.0	12.1	10.1
Students receiving G I Bill	09.2	07.4	12.5	02.9	00.0	05.6	16.1
Students receiving a scholarship	03.9	03.9	03.4	09.4	24.0	04.2	02.2
Students who plan to work toward 4 year degree	28.0	33.6	44.1	18.1	64.0	22.0	19.7
Students who plan to be employed in North Carolina	75.8	78.5	72.4	86.5	72.0	81.7	80.9

. When planning social activities it should be remembered that more than one-half of the students commute to class, are employed, and that one-fourth of the students' families have an annual income of less than \$4000.

. The housing situation should be reviewed in institutions where almost one-third of the students are boarding students.

. There should be a more effective communication between the high school counselor and the community colleges and technical institutes. Summer workshops for the high school counselors are recommended as one method of informing the counselor.

. Broader vocational offerings in the secondary schools, in addition to vocational guidance, should do much to motivate a larger percentage of vocational students to continue their training at the post-secondary institutions.

. The fact that one-fourth of the technical students plan to work toward a four-year degree seems to justify concern. One or more of the following situations should help to satisfy at least part of the problem:

- provide a more adequate guidance program for the students
- provide exploratory programs for students who are undecided
- investigate the feasibility of a Bachelor of Technology degree for those technical students who desire to continue their education.

BIBLIOGRAPHY

BIBLIOGRAPHY

Books

- Allen, Lloyd and Elaine Forsyth Cook. A Sociological Approach to Education. New York: McGraw Hill Book Company, Inc., 1950.
- Blocker, Clyde E., Robert H. Plummer and Richard C. Richardson, Jr. The Two-Year College: A Social Synthesis. Englewood Cliffs: Prentice Hall, Inc., 1965.
- Bogue, Jesse Parker. The Community College. New York: McGraw Hill Book Company, Inc., 1950.
- Brick, Michael. Forum and Focus for the Junior College Movement: The American Association of Junior Colleges. New York: Teachers College Press, 1964.
- Brownell, Baker. The College and the Community. New York: Harper and Brothers, 1952.
- Campbell, Ronald F. and John A. Ramseyer. The Dynamics of School - Community - Relationships. New York: Allyn and Bacon, Inc., 1955.
- Clark, Burton R. The Open Door College: A Case Study. New York: McGraw Hill Book Company, 1960.
- Diekhobb, John A. Democracy's College. New York: Harper and Brothers, 1950.
- Fields, Ralph R. The Community College Movement. New York: McGraw Hill Book Company, 1962.
- Fretwell, Elbert K., Jr. Founding Public Junior Colleges: Local Initiative in Six Communities. New York: Teachers College Press, 1954.
- Gleazer, Edmund J., Jr., (ed.) American Junior Colleges. Washington, D. C.: American Council on Education, 1963.

- Harris, Norman C. Technical Education in the Junior College: New Programs for New Jobs. Washington, D. C.: American Association of Junior Colleges, 1964.
- Havemann, Ernest and Patricia Salterwest. They Went to College. New York: Harcourt, Brace, and Company, 1952.
- Henninger, G. Ross. The Technical Institute in America. New York: McGraw Hill Book Company, 1959.
- Henry, Nelson B., (ed.) The Public Junior College. University of Chicago Press, 1956.
- Hillway, Tyrus. The American Two-Year College. New York: Harper and Brothers, 1958.
- Kretschmer, E. Physique and Character. New York: Harcourt, Brace, and Company, 1925.
- McConnell, T. R. A General Pattern for American Public Higher Education. New York: McGraw Hill Book Company, 1962.
- McKinney, John C. Constructive Typology and Social Theory. New York: Appleton-Century-Crofts, 1959.
- Medsker, Leland L. The Junior College: Progress and Prospect. New York: McGraw Hill Book Company, 1960.
- Olsen, Edmund G., (ed.) School and Community. New York: Prentice Hall, Inc., 1954.
- Rogers, Everett M. Social Change in Rural Society. New York: Appleton-Century-Crofts, Inc., 1960.
- Sexton, Pat. Education and Income: Inequalities in Our Public Schools. New York: Viking Press, 1961.
- Smith, Leo F., and Laurence Lipsett. The Technical Institute. New York: McGraw Hill Book Company, 1956.
- Thornton, James, Jr. The Community Junior College. New York: John Wiley and Sons, Inc., 1960.
- Ward, Phebe. Terminal Education in the Junior College. New York: Harper and Brothers, 1947.

Articles and Periodicals

- Beckes, Isaac K. "The Case for Community Colleges," Junior College Journal, XXXIV (April, 1964), 24-30.
- Besse, R. M. "Education and the Race Problem," Junior College Journal, XXXV (October, 1964), 3-7.
- Bogue, Jesse P. "The Needs of Junior Colleges in an Expanding Role," Junior College Journal, XXVIII (February, 1958), 305-306.
- Bogue, Jesse P., and Shirley Sanders. "Analysis of Junior College Growth," Junior College Journal, XIX (February, 1949), 311-319.
- Boren, Claude B. "Why A Junior College Movement?" Junior College Journal, XXIV (February, 1954), 345-357.
- Campion, Howard A. "The Junior College Must Hold Open the Closing Door of Opportunity for Higher Education," Junior College Journal, XXXI (May, 1961), 511-512.
- Colvert, C. C. "The Expanding Role of the Junior College," Junior College Journal, XXVIII (January, 1958), 245-246.
- Corey, John. "North Carolina's New System of Vocational and Technical Education," Phi Delta Kappan, XXXXVI (April, 1965), 383-387.
- Cox, R. G. "Retrospect and Prospect," Junior College Journal, I (March, 1931), 27-36.
- Crank, Doris H., and Floyd L. Crank. "New Perspectives for Business in the Junior College," New Perspectives in Education for Business, Washington, D. C.: National Business Education Association, 1963, 369-392.
- Gleazer, Edmund J., Jr. "Our Emerging Profile," Junior College Journal, XXXIV (May, 1964), 3-4.
- Goldberg, Arthur J. "Education for Freedom and Equality," Junior College Journal, XXXVI (September, 1965), 6-10.
- Harris, Norman C. "A Special Role in Engineering Education," Junior College Journal, XXXIII (April, 1963), 8-12.
- Harris, Norman C. "Redoubled Efforts and Dimly Seen Goals," Phi Delta Kappan, XXXXVI (April, 1965), 360-365.
- Holmes, Charles H. "The Transfer Student in the College of Arts," Junior College Journal, XXXI (April, 1961), 456-461.

- Kastner, Harold H. "The Economic Value of Community Colleges," Junior College Journal, XXXVI (November, 1965), 29-34.
- Keppel, Francis. "Standards of Excellence," Junior College Journal, XXXIV (September, 1963), 8-11.
- Koos, Leonard V. "Local versus Regional Junior Colleges," School Review, LII (November, 1944), 525.
- Kuhns, Eileen P. "Part-Time Faculty," Junior College Journal, XXXIII (January, 1963), 8-12.
- Light, Israel. "Training for Health Occupations," Junior College Journal, XXXIII (March, 1963), 16-21.
- Lindsay, F. B. "Junior Colleges in Higher Education," Junior College Journal, XXVIII (November, 1957), 125-131.
- Littlefield, Henry W. "America's Stake in the Junior College," Junior College Journal, XXXI (May, 1961), 483-491.
- McCall, R. C. "How Does the Comprehensive Community Junior College Promote Scholastic Excellence?" Junior College Journal, XXXI (May, 1961) 533-536.
- McDivitt, W. L. "The Need for Junior Colleges," Delta Pi Epsilon Journal, VII (November, 1964), 1-3.
- Martorana, S. V., and L. L. Williams, "Academic Success of Junior College Transfers at the State College of Washington," Junior College Journal, XXIV (March, 1954), 402-415.
- McQuitty, Louis L. "A Pattern Analysis of Descriptions of 'Best' and 'Poorest' Mechanics Compared with Factor Analysis Results," Psychological Monographs: General and Applied, LXXI, No. 17 (Autumn, 1961), 677-680.
- Meany, George. "Labor and the Community College," Junior College Journal, XXIV (February, 1964), 6-8.
- Medsker, Leland L. "Diversity, A Fact and A Responsibility," Junior College Journal, XXVIII (May, 1958), 505-513.
- Meehl, Paul E. "Configural Scoring," Journal of Consulting Psychology, XIV (1950), 165-171.
- Muirhead, Peter P. "The Junior College Must Assist in an Important Way To Discharge Society's Obligation to Put Higher Education Within Financial Reach of All Qualified Students," Junior College Journal, XXXI (May, 1961), 513-518.

Nall, Alfred W. "What About 'Terminal' General Education in the Junior Colleges?" Junior College Journal, XXXIII (September, 1962), 20-24.

National Advisory Committee on the Junior College. "Junior Colleges--A Policy Statement," Education Digest, XXX (March, 1965), 39-42.

Neilan, E. P. "The Changing Educational Scene: Community Colleges May Hold the Key to Future Economic Growth," Junior College Journal, XXXIV (October, 1963), 4-8.

Neumaier, John J. "The Functions of the Junior College," Junior College Journal, XXVII (February, 1957), 333-335.

O'Connell, Alfred C. "The Open Door College: A License to Fail," Junior College Journal, XXI (January, 1961), 241-242.

Parker, Franklin. "Community Junior College, Enfant Terrible of American Higher Education: A Bibliography of 225 Doctoral Research Dissertations," Junior College Journal, XXXII (December, 1961), 193-204.

Plummer, Robert H., and Richard C. Richardson, Jr. "Broadening the Spectrum of Higher Education--Who Teaches the High Risk Student?" Journal of Higher Education, XXXV (June, 1964), 308-312.

Pray, Francis, C. "A PR Trilogy," Junior College Journal, XXXIV (November, 1963), 16-20.

Reed, Dell, and H. S. Bonar. "What Future Role for the Junior and Community College?" Bulletin of the National Association of Secondary-School Principals, XXXXIII (April, 1959), 69-74.

Schultz, Raymond E. and R. Curtis Elmer. "How Do Day and Evening Students Compare?" Junior College Journal, XXXVII (September, 1966), 34-36.

Shriver, Robert Sargent. "The Role of Junior Colleges in the Intellectual War," Junior College Journal, XXVIII (March, 1958), 365-367.

Vaccaro, Louis, C. "The Manpower Development and Training Act and the Community College," Junior College Journal, XXXIV (November, 1963), 21-23.

Valade, W. J. "The Community College Ideal," Junior College Journal, XXVIII (February, 1958), 332-336.

Walsh, J. P. "Manpower Development: A Junior College Responsibility," Junior College Journal, XXXIV (May, 1964), 8-12.

Wattenbarger, James L. "Task Forces Study Five Areas of Florida's Junior College Growth," Junior College Journal, XXXIV, No. 2 (October, 1963).

Winch, Robert F. "Heuristic and Empirical Typologies: A Job for Factor Analysis," American Sociological Review, XII, No. 1 (February, 1947), 68-75.

Yourman, Julius. "Community Coordination-The Next Movement in Education," Journal of Education Sociology, VIV (February, 1936), 327-330.

Other

Anthony, Donald M. "The Relationship of Certain Socio-Economic and Academic Factors to Student Choice of Occupation and Program in Public Junior Colleges." Unpublished Doctoral Dissertation, University of Texas, 1964.

Bird, Grace V. "Preparation for Advanced Study," The Public Junior College. Edited by Nelson B. Henry, Chicago: University of Chicago Press, 1956.

Caryle, Irving E. The Governor's Commission on Education Beyond the High School. Raleigh: State of North Carolina, 1962.

Cole, Charles C. Encouraging Scientific Talent. New York: College Entrance Examination Board, 1956.

The Comprehensive Community College System in North Carolina. Raleigh: Department of Community Colleges, 1967.

Dressel, Paul L. "Educational Demands Arising from Individuals Needs and Purposes," The Public Junior College. Edited by Nelson B. Henry. Chicago: University of Chicago Press, 1956.

Facing Facts About College Admissions. Newark: The Prudential Insurance Company of America, 1962.

Facing Facts About the Two-Year College. Newark: The Prudential Insurance Company of America, 1963.

General Education in Action. Washington: American Council on Education, 1952.

Hamilton, Horace. Community Colleges for North Carolina. Raleigh: North Carolina Board of Higher Education, 1962.

Henson, Mary F. Trends in the Income of Families and Persons in the United States, 1947-1964. Washington: United States Department of Commerce, Technical Paper 17, 93.

Hurlburt, Allan S. Community College Study. Raleigh: State Superintendent of Public Instruction, 1952.

Johnson, Marvin E. Practices in the Selection of Apprentices for Training and Their Relation to the Completion Rate. Doctor's Thesis. Columbia, Missouri: University of Missouri, 1959.

Larson, Milton E. A Study of the Characteristics of Students, Teachers, and the Curriculum of Industrial-Technical Education in the Public Community Junior College of Michigan. Unpublished Doctoral Dissertation. Michigan State University, 1965.

Los Angeles City School District. Some Characteristics of Engineering Technical Students in the Los Angeles City Junior College District, Research Report No. 248. Los Angeles: The District, 1962.

MacLean, Malcolm S., and Dan W. Dodson. "Educational Needs Emerging from the Changing Demands of Society," The Public Junior College. Edited by Nelson B. Henry, Chicago: University of Chicago Press, 1956.

Merlo, Frank P. and W. Donald Walling. Guide for Planning Community College Facilities. New Brunswick: Rutgers Graduate School of Education, 1964.

Metcalf, Alan W. Community College Student Characteristics. Olympia: State Superintendent of Public Instruction, 1965.

"Opening Enrollment in Higher Education," Analytic Report Office of Education Circular No. 545. Washington: Government Printing Office, 1959.

"Organizing Higher Education," Higher Education for American Democracy Report of the President's Commission on Higher Education. Washington: Government Printing Office, 1947, Vol. III.

Polk Junior College Bulletin. Bartow, Florida, 1966-67.

President's Commission on Higher Education. Higher Education for American Democracy, Volume I: Establishing the Goals. Washington, D. C.: Government Printing Office, 1947.

Public School Laws of North Carolina, (1963), C. 115, Sec. A., General Statutes of North Carolina.

Sindlinger, Walter E. "Variety Among Junior and Community Colleges," From High School to College: Readings for Counselors. New York: College Entrance Examination Board, 1965.

Snepp, Neil O. Agricultural Offerings in Community Colleges in the United States. Doctor's Thesis. Columbus: The Ohio State University, 1963.

Technical Education May Be for You. Montreal: Sun Life Assurance Company of Canada, 1967.

United States Census of Population Characteristics, Washington: United States Department of Commerce, Table D-1, 35-530.

Vocational Training Opportunities in North Carolina. Raleigh: North Carolina Good Neighbor Council, 1966.

"Who Came to Coalinga College?" Coalinga: Office of Instruction and Records 1958. (Mimeographed) Quoted in James W. Thornton, Jr., The Community Junior College. New York: John Wiley and Sons, Inc., 1960.

APPENDIXES

APPENDIX A

LETTER TO PRESIDENTS OF COMMUNITY COLLEGES
AND TECHNICAL INSTITUTES

Letters to Presidents of Community Colleges
and Technical Institutes

Department of Community Colleges



State Board of Education
Raleigh North Carolina

January 22, 1968

MEMO TO: Presidents of Institutions

FROM: I. E. Ready

The North Carolina Department of Community Colleges has been requested by the United States Department of Health, Education, and Welfare to submit a comprehensive report in 1968. In order that this report will be factual and up-to-date, a survey instrument has been constructed and each credit student enrolled in a North Carolina Community College unit will be asked to complete one of these data sheets.

The information obtained from this study will not only be of value to federal and state agencies but will provide the local institution up-to-date information concerning the socio-economic characteristics of its students. The final report (December, 1968) will contain the following:

1. A socio-economic profile of the North Carolina Community College Student
2. Socio-economic profiles of the college transfer, technical, and vocational student
3. Socio-economic profiles for students enrolled in each of the existing forty-three community college units
4. Socio-economic profiles for students enrolled in each of the seven Occupational Curriculum (Agricultural, Business, Engineering, and etc.)

The above profiles will be constructed from data obtained from data sheets that will be distributed at the January meeting of Personnel Directors at Richmond Technical Institute.

Most of the funds for this study are available from federal sources thus allowing the North Carolina System to make a comprehensive study of its students with a minimum of cost to the Department of Community Colleges.

Because of the potential value of this information to the federal report, to state legislative reports, to the people of North Carolina, and to your institution, I urge you to encourage a 100 percent participation of students enrolled in credit programs.

APPENDIX B
DEFINITION OF TERMS

DEFINITION OF TERMS

Comprehensive Community College - (North Carolina) provides for those beyond the normal high school age of 18 years old or older, whether they are high school graduates or not, appropriate, economical, and nearby learning opportunities. These opportunities range, depending upon individual needs and previous educational achievements, from the first grade level through the second year of college -- including vocational, technical, and general adult education.

"Open Door" Policy - For any person 18 years old or older who seriously wants and needs more education, the doors of the institution within the system are open.

College Transfer Programs - Two year programs designed for transfer to senior colleges for work to apply toward a baccalaureate degree. Successful completion of the two-year program leads to the Associate of Arts degree.

Technical Programs - Two-year programs designed to prepare individuals for jobs in which some manipulative skill is required but in which technical knowledge is emphasized. These programs are developed as college level programs but usually lead to employment upon graduation. Graduates of the technical programs receive the Associate in Applied Science degree.

Vocational Programs - Programs ranging from one to four quarters in length, depending upon the development of skills and job proficiency. Major emphasis is placed on practice rather than theory. Certificates are usually awarded upon completion of the one to three quarter programs, whereas diplomas are awarded upon completion of the four quarter programs.

Terminal Student - One who will not continue his education at a level above the junior college.

Day Student - A person taking more than half of his classes before 5:00 P. M.

Evening Student - A person taking more than half of his classes after 5:00 P. M.

Full-Time Student - A person enrolled 16 (contact) hours per week.

Part-Time Student - A person enrolled less than 16 (contact) hours per week.

Contact Hours - Number of hours the class meets. Normally figured on a weekly basis.

ERIC REPORT RESUME

ERIC ACCESSION NO.			
CLEARINGHOUSE ACCESSION NUMBER	RESUME DATE — —	P.A.	T.A.
IS DOCUMENT COPYRIGHTED?		YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
ERIC REPRODUCTION RELEASE?		YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
TITLE SOCIO-ECONOMIC PROFILE OF CREDIT STUDENTS IN THE NORTH CAROLINA COMMUNITY COLLEGE SYSTEM			
PERSONAL AUTHOR(S) Bolick, Gerald M.			
INSTITUTION (SOURCE) North Carolina State Board of Education Department of Community Colleges, Raleigh, North Carolina			SOURCE CODE
REPORT/SERIES NO.			
OTHER SOURCE			SOURCE CODE
OTHER REPORT NO.			
OTHER SOURCE			SOURCE CODE
OTHER REPORT NO.			
PUB'L. DATE 1 - 7 - 69			CONTRACT GRANT NUMBER OEG-3-9-080033-0005 (010)
PAGINATION, ETC. 87 pages			
RETRIEVAL TERMS			
IDENTIFIERS			
ABSTRACT The primary purpose of the study is to provide an up-to-date report on certain social and economic characteristics of credit students enrolled in a newly established comprehensive community college system. A socio-economic data sheet was constructed by the writer and completed by 11,184 students enrolled in forty-two North Carolina community colleges and technical institutes. Comparisons were made between the North Carolina student and students in other states, in addition to comparisons among the program areas and among curriculums within the occupational programs. The study indicates that the community colleges and technical institutes, through the "Open Door" policy, have successfully extended universal education beyond the high school. But certain factors should be strengthened if these institutions are to provide a sound educative program for "all" the community. The results of the study indicate that there should be a determined effort to provide additional opportunities for the lower socio-economic groups, the female, the evening student, and the "over 25" student. Social activities and the housing situation should be reviewed and adapted to the local situation. A more coordinated effort among the high schools, the community colleges and technical institutes, and the senior colleges is needed to provide a sound educative program for "all" the community.			

INSTRUCTIONS FOR COMPLETING ERIC REPORT RESUME

The resume is used to identify summary data and information about each document acquired, processed, and stored within the ERIC system. In addition to serving as a permanent record of the document in the collection, the resume is also a means of dissemination. All fields of the form must be completed in the allotted spaces, but inapplicable fields should be left blank. The following instructions are keyed to the line numbers appearing in the left margin of the form:

TOP LINE. ERIC Accession No. Leave blank. A permanent ED number will be assigned to each resume and its corresponding document as they are processed into the ERIC system.

LINE 001. Clearinghouse Accession No. For use only by ERIC Clearinghouses. Enter the alpha code and 6-digit document number.

Resume Date. In numeric form, enter month, day, and year that resume is completed. (Example: 07 14 66)

P.A. Leave blank.

T.A. Leave blank.

Copyright. Check appropriate block to denote presence of copyrighted material within the document.

ERIC Reproduction Release. Check appropriate block to indicate that ERIC has permission to reproduce the document and its resume form.

LINES 100-103. Title. Enter the complete document title, including subtitles if they add significant information. Where applicable, also enter volume number or part number, and the type of document (Final Report, Interim Report, Thesis, etc.).

LINE 200. Personal Author(s). Enter personal author(s), last name first. (Example: Doe, John J.) If two authors are given, enter both. (Example: Doe, John J. Smith, Ted). If there are three or more authors, list only one followed by "and others."

LINE 300. Institution (Source). Enter the name of the organization which originated the report. Include the address (city and State) and the subordinate unit of the organization. (Example: Harvard Univ., Cambridge, Mass., School of Education.)

Source Code. Leave blank.

LINE 310. Report/Series No. Enter any unique number assigned to the document by the institutional source. (Example: SC-1234)

LINE 320. Other Source. Use only when a second source is associated with the document. Follow instructions for Line 300 above.

Source Code. Leave blank.

LINE 330. Other Report No. Enter document number assigned by the second source.

LINE 340. Other Source. Use only when a third source is associated with the document. Follow instructions for Line 300 above. Source Code. Leave blank.

LINE 350. Other Report No. Enter document number assigned by the third source.

LINE 400. Publication Date. Enter the day, month, and year of the document. (Example: 12 Jun 66)

Contract/Grant Number. Applicable only for documents generated from research sponsored by the U.S. Office of Education. Enter appropriate contract or grant number and its prefix. (Example: OEC-1-6-061234-0033)

LINES 500-501. Pagination, etc. Enter the total number of pages of the document, including illustrations and appendixes. (Example: 115p.) **USE THIS SPACE FOR ADDITIONAL INFORMATION PERTINENT TO THE DOCUMENT**, such as publisher, journal citation, and other contract numbers.

LINES 600-606. Retrieval Terms. Enter the important subject terms (descriptors) which, taken as a group, adequately describe the contents of the document.

LINE 607. Identifiers. Enter any additional important terms, more specific than descriptors, such as trade names, equipment model names and numbers, organization and project names, discussed in the document.

LINES 800-822. Abstract. Enter an informative abstract of the document. Its style and content must be suitable for public announcement and dissemination.